NM1 - 9

C-138

YEAR(S):

2002

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☑ ☐ Verbal Approval Received: Yes ☐ No ☑	4. Generator COASTAL CHEMICAL CO.
	5. Originating Site WASH WATER TANK
2. Management Facility Destination KEY ENERGY DISPOSAL	6. Transporter KEY ENERGY
3. Address of Facility Operator #345 C.R. 3500 , AZTEC NM	State NM
7. Location of Material (Street Address or ULSTR) 1130 MADISON LANE FARMINGTON NM 87401	

DEC 2002
RECEIVED
OIL CONS. DIV.
DIST. 3

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:
RINSE WATER FROM HOSES AND TANKS THAT CONTAINED OR HELD VIRGIN UNUSED TREATING CHEMICALS.

MSDS INFO
LAST FILED 6-17-02
M.T.
V mjt
OK
On File

Estimated Volume _250BBLS_____cy Known Volume (to be entered by the operator at the end of the haul) _____cy

SIGNATURE _____ TITLE: MANAGER_____ DATE: _12-05-02_____
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: ___MICHAEL TALOVICH_____ TELEPHONE NO. _505-334-6416_____

12 12 02 - 1

(This space for State Use)

APPROVED BY: Denny Foust TITLE: Envirog/Engr DATE: 12/06/02

APPROVED BY: Martyn J Kilp. TITLE: Environmental Geologist DATE: 12/12/02

obbs, NM 88240
District II - (505) 748-1283
11 S. First
rtesia, NM 88210
District III - (505) 334-6178
000 Rio Brazos Road
ztec, NM 87410
District IV - (505) 827-7131
220 S Pacheco
anta Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD
Permitted Surface
Waste Management
Facility

GENERATOR CERTIFICATE OF WASTE STATUS

Waste Generator Name and Address:

Coastal Chemical C.o. LLC
1130 Madison Ln.
Farmington NM 87401

2 Permit Number (if waste generated at an OCD permitted facility)

Description of Waste and Generating Process:

Rinse water from pump, hoses and tanks used to deliver chemical. All Chemicals rinsed out are virgin unused chemicals Chemicals may include Alkanolamine, Glycol (Teg & Eg) Antifreeze.

4. Location of Waste (Street address &/or ULSTR):

Coastal Chemical Co LLC
1130 Madison Lane
Farmington NM 87401

Destination (Surface Waste Management Facility):

Key Energy Disposal

6. Transporter:

Estimated Volume _____ cy/bbls

or **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

__xx__ MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

enerator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection ency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

__xx__ **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this aste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 ubpart 1403.

enerator Signature: Mike Farmer Date: 12-3-02

int Name: Mike Farmer

le: Facility Manager

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ ☐Verbal Approval Received: Yes ☐ No ☒	4. Generator HALLIBURTON 5. Originating Site YARD STORAGE TANK
2. Management Facility Destination KEY ENERGY DISPOSAL	6. Transporter KEY ENERGY
3. Address of Facility Operator # 345 C.R. 3500 AZTEC NM	8. State NM
7. Location of Material (Street Address or ULSTR)4109 E MAIN,FARMINGTON NM	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:
VARIOUS UNSED FRAC FLUIDS STORED IN THEIR YARD "JUNK WATER TANK"

LAST FILED 01-04-02

SEE ANALYTICAL DATED 10-26-01

SEP 2002
RECEIVED
OIL CONSERV. DIV.
DIST. 3

Estimated Volume ____250BBLS_____cy Known Volume (to be entered by the operator at the end of the haul)
_____cy

SIGNATURE [signature] TITLE: MGR DATE: 08-04-02 9/4/02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6416

(This space for State Use)

APPROVED BY: [signature] TITLE: Enviro/ Engr Geologist DATE: 9/6/02

APPROVED BY: [signature] TITLE: Environmental Geologist DATE: 9/9/02

District I - (505) 393-6161
1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD
Permitted Surface
Waste Management
Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:
Halliburton Energy Services
4109 E Main
Farmington NM 87402

2. Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:
Returned Frac Fluids that were stored in what is referred to as Junk water tank completion 10/26/01

4. Location of Waste (Street address &/or ULSTR):
Halliburton Energy Services
4109 E Main St
Farmington NM 87402

5. Destination (Surface Waste Management Facility):
Key Energy Services

6. Transporter:
Key Energy

7. Estimated Volume 8 cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

_____ MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

X Other (Description) Knowledge of Process & Filed previously refer to Analytical #3

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

X **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: Allen Rodrigue Date: 9-4-02

Print Name: ALLEN Rodrigue

Title: Facility Supervisor

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Junk Water	Date Reported:	11-01-01
Lab ID#:	21344	Date Sampled:	10-26-01
Sample Matrix:	Water	Date Received:	10-26-01
Preservative:	Cool	Date Analyzed:	11-01-01
Condition:	Cool and Intact	Chain of Custody:	9627

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 6.91**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*
Reference:	40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.
Comments:	**4109 E. Main St.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Junk Water	Date Reported:	10-30-01
Laboratory Number:	21344	Date Sampled:	10-26-01
Chain of Custody:	9627	Date Received:	10-26-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	10-30-01
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0235	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0225	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **4109 E. Main St.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Junk Water	Date Reported:	11-01-01
Laboratory Number:	21344	Date Sampled:	10-26-01
Chain of Custody:	9627	Date Received:	10-26-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	11-01-01
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **4109 E. Main St.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Junk Water	Date Reported:	11-01-01
Laboratory Number:	21344	Date Sampled:	10-26-01
Chain of Custody:	9627	Date Received:	10-26-01
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	11-01-01
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.020**	**5.0**
Hexachloroethane	**ND**	**0.020**	**3.0**
Nitrobenzene	**0.090**	**0.020**	**2.0**
Hexachlorobutadiene	**ND**	**0.020**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.020**	**0.13**
HexachloroBenzene	**ND**	**0.020**	**0.13**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	**97%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **4109 E. Main St.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Junk Water	Date Reported:	10-30-01
Laboratory Number:	21344	Date Sampled:	10-26-01
Chain of Custody:	9627	Date Received:	10-26-01
Sample Matrix:	Water	Date Analyzed:	10-30-01
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**ND**	**0.001**	**5.0**
Barium	**0.048**	**0.001**	**100**
Cadmium	**ND**	**0.001**	**1.0**
Chromium	**0.002**	**0.001**	**5.0**
Lead	**0.001**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**ND**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **4109 E. Main St.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	10-30-01
Laboratory Number:	10-30-TCV	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-30-01
Condition:	N/A	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 21344.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	10-30-01
Laboratory Number:	21344	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	10-30-01
Condition:	N/A	Date Extracted:	N/A

Parameter	Sample Result (mg/L)	Duplicate Sample Result (mg/L)	Detection Limits (mg/L)	Percent Difference
Vinyl Chloride	ND	ND	0.0001	0.0%
1,1-Dichloroethene	ND	ND	0.0001	0.0%
2-Butanone (MEK)	0.0235	0.0235	0.0001	0.0%
Chloroform	ND	ND	0.0001	0.0%
Carbon Tetrachloride	ND	ND	0.0001	0.0%
Benzene	0.0225	0.0225	0.0001	0.0%
1,2-Dichloroethane	ND	ND	0.0001	0.0%
Trichloroethene	ND	ND	0.0003	0.0%
Tetrachloroethene	ND	ND	0.0005	0.0%
Chlorobenzene	ND	ND	0.0003	0.0%
1,4-Dichlorobenzene	ND	ND	0.0002	0.0%

ND - Parameter not detected at the stated detection limit.

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: **QA/QC for sample 21344.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spike	Date Reported:	10-30-01
Laboratory Number:	21344	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	10-30-01
Condition:	N/A	Date Extracted:	N/A

Parameter	Sample Result (mg/L)	Spike Added (mg/L)	Spiked Sample Result (mg/L)	Det. Limit (mg/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Vinyl Chloride	ND	0.050	0.0495	0.0001	99%	28-163
1,1-Dichloroethene	ND	0.050	0.0494	0.0001	99%	43-143
2-Butanone (MEK)	0.0235	0.050	0.0725	0.0001	99%	47-132
Chloroform	ND	0.050	0.0500	0.0001	100%	49-133
Carbon Tetrachloride	ND	0.050	0.0490	0.0001	98%	43-143
Benzene	0.0225	0.050	0.0720	0.0001	99%	39-150
1,2-Dichloroethane	ND	0.050	0.0490	0.0001	98%	51-147
Trichloroethene	ND	0.050	0.0495	0.0003	99%	35-146
Tetrachloroethene	ND	0.050	0.0495	0.0005	99%	26-162
Chlorobenzene	ND	0.050	0.0495	0.0003	99%	38-150
1,4-Dichlorobenzene	ND	0.050	0.0495	0.0002	99%	42-143

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: **QA/QC for sample 21344.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report
Laboratory Blank

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	11-01-01
Laboratory Number:	11-01-TCA	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-01-01
Condition:	N/A	Analysis Requested:	TCLP

Analytical Results Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorophenol	98 %
	2,4,6-tribromophenol	99 %

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 21344.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	11-01-01
Laboratory Number:	21344	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Date Analyzed:	11-01-01
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Detection Limit (mg/L)	Percent Difference
o-Cresol	ND	ND	0.020	0.0%
p,m-Cresol	ND	ND	0.040	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	0.0%
Pentachlorophenol	ND	ND	0.020	0.0%

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
	8040 Compounds	30.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 21344.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	11-01-01
Laboratory Number:	11-01-TBN	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	11-01-01
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.020**	**5.0**
Hexachloroethane	**ND**	**0.020**	**3.0**
Nitrobenzene	**ND**	**0.020**	**2.0**
Hexachlorobutadiene	**ND**	**0.020**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.020**	**0.13**
HexachloroBenzene	**ND**	**0.020**	**0.13**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	**96%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 21344.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QA/QC Matrix Duplicate Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	11-01-01
Laboratory Number:	21344	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	11-01-01
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Percent Difference	Det. Limit (mg/L)
Pyridine	ND	ND	0.0%	0.020
Hexachloroethane	ND	ND	0.0%	0.020
Nitrobenzene	0.090	0.089	0.9%	0.020
Hexachlorobutadiene	ND	ND	0.0%	0.020
2,4-Dinitrotoluene	ND	ND	0.0%	0.020
HexachloroBenzene	ND	ND	0.0%	0.020

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Maximum Difference
	8090 Compounds	30%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for sample 21344.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-30-TCM QA/QC	Date Reported:	10-30-01
Laboratory Number:	21344	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	10-30-01
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	0.048	0.047	2.1%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%
Lead	ND	ND	0.001	0.001	0.001	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.499	99.8%	80% - 120%
Barium	0.500	0.048	0.547	99.8%	80% - 120%
Cadmium	0.500	ND	0.498	99.6%	80% - 120%
Chromium	0.500	0.002	0.501	99.8%	80% - 120%
Lead	0.500	0.001	0.500	99.8%	80% - 120%
Mercury	0.050	ND	0.049	98.0%	80% - 120%
Selenium	0.500	ND	0.498	99.6%	80% - 120%
Silver	0.500	ND	0.499	99.8%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for sample 21344.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ ☐Verbal Approval Received: Yes ☐ No ☒	4. Generator COASTAL CHEMICAL CO.
	5. Originating Site FARMINGTON YARD
2. Management Facility Destination KEY ENERGY DISPOSAL	6. Transporter KEY ENERGY
3. Address of Facility Operator # 345 C.R. 3500 AZTEC NM	8. State NM
7. Location of Material (Street Address or ULSTR) 1130 MADISON LANE FARMINGTON NM 87401	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:
CITY WATER MIXED WITH SMALL AMOUNTS OF UNUSED TREATING FLUIDS

See C-138 and MSDS info filed and approved 6-24-02

Estimated Volume ___ < 200 bbls_____cy Known Volume (to be entered by the operator at the end of the haul)
_____cy

SIGNATURE _____ TITLE: _MANAGER_____ DATE: _08-27-02_____
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH_____ TELEPHONE NO. 505-334-6416

050202-1

(This space for State Use)

APPROVED BY: Denny Foust TITLE: Enviro/Engr DATE: 8/27/02

APPROVED BY: Martyn J. Kelly TITLE: Environmental Geologist DATE: 9/3/02

District I - (505) 393-6161
1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S. Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD
Permitted Surface
Waste Management
Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:
COASTAL CHEMICAL CO. LLC
1130 MADISON LANE
FARMINGTON NM 87401

2 Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:
RINSE WATER FROM PUMP, HOSES, AND TANKS USED TO DELIVER CHEMICALS ALL CHEMICALS RINSED ARE VIRGIN UNUSED CHEMICALS WHICH MAY INCLUDE ALKANOLAMINE, GLYCOL (TEG, EG) & CHELATES

4. Location of Waste (Street address &/or ULSTR):
COASTAL CHEMICAL Co. LLC
1130 MADISON LANE
FARMINGTON, NM 87401

5. Destination (Surface Waste Management Facility):
KEY ENERGY DISPOSAL

6. Transporter:
KEY ENERGY

7. Estimated Volume _____ cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

XX MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

XX **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: _____ Date: 8-23-02

Print Name: JOHN MESSNER

Title: WAREHOUSE MANAGER

Martyne Kreling

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ ☐Verbal Approval Received: Yes ☐ No ☒	4. Generator OIL AND GAS EQUIPMENT 5. Originating Site SHOP SUMP
2. Management Facility Destination KEY ENERGY DISPOSAL	6. Transporter KEY ENERGY
3. Address of Facility Operator # 345 CR 3500 AZTEC NEW MEXICO	8. State NM
7. Location of Material (Street Address or ULSTR) 4910 E. MAIN,FARMINGTON	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

CITY WATER MIXED WITH CLEANING AGENTS AND NEUTRALIZER

JUL 2002
RECEIVED
OIL CONS. DIV.
DIST. 3

Estimated Volume 80 bbls _____ cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: MANAGER DATE: 7/23/02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6176

-20020

(This space for State Use)

APPROVED BY: _____ TITLE: Envirn/ Engr DATE: 07/25/02

APPROVED BY: _____ TITLE: Environmental Geologist DATE: 7/30/02

District I - (505) 393-6161
1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S. Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD Permitted Surface Waste Management Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:
Oil & Gas Equip.
1910 E. Main
Farmington NM 87402

2. Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:
Hot Bath for Cleaning Glycol pumps & Values used on oil field production Equip.

4. Location of Waste (Street address &/or ULSTR):
SAME

5. Destination (Surface Waste Management Facility):
Key

6. Transporter:
Key

7. Estimated Volume 80 cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

X MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

X **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: _____ Date: 7-22-02

Print Name: Robert Lakevish

Title: _____

THE REPRODUCTION OF

THE

FOLLOWING

DOCUMENT (S)

CANNOT BE IMPROVED

DUE TO

THE CONDITION OF

THE ORIGINAL

CLEAN ACROSS AMERICA AND THROUGHOUT THE WORLD™

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING AND DISPOSAL INFORMATION

ISSUE DATE: 02/01/89
SUPERSEDES: 12/30/88
Date printed: 11/17/99

ZEP VAT NEUTRALIZER
Product No: 1465 Vat Neutralizer

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
(404) 352-1680 *BETWEEN 8:00 AM - 5:00 PM (EST)*
MEDICAL EMERGENCY:
(770) 439-4200 *NON OFFICE HOURS, WEEKENDS*
(770) 432-2873 *AND HOLIDAYS, PLEASE CALL YOUR*
(770) 455-8160 **LOCAL POISON CONTROL**
(770) 552-8836
(770) 424-2048
(770) 424-4789
TRANSPORTATION EMERGENCY:
(770) 922-0923
CHEMTREC:
(800) 424-9300 TOLL FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA:
(202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
@** SULFURIC ACID ** oil of vitriol; CAS# 7664-93-9; RTECS# WS5600000; OSHA PEL-1 mg/m3 (for mists only).	0.25	TOX COR	60-70

@ IDENTIFIES CHEMICALS LISTED UNDER SARA-SECTION 313 FOR RELEASE REPORTING.

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:
Corrosive to skin and eyes on contact. Eye contact can produce corneal damage or blindness. Skin contact can produce inflammation, reddening, and blistering. Inhalation of spray mist or vapors may produce irritation, burning, or destruction of tissues in the respiratory tract, characterized by coughing choking, pain, or shortness of breath. Severe overexposure may lead to fatal lung damage. Ingestion can cause abdominal pain, nausea, vomiting, and collapse, along with tissue destruction in the gastrointestinal tract.

CHRONIC EFFECTS OF OVEREXPOSURE:
Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

EST'D PEL/TLV: Not established PRIMARY ROUTES OF ENTRY: N/A

HMIS CODES: HEALTH 3; FLAM. 0; REACT. 2; PERS. PROTECT. G ; CHRONIC HAZ. YES

FIRST AID PROCEDURES:
SKIN: Immediately flush contaminated skin with plenty of water for at least 15 minutes. Get medical attention immediately.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
INGEST: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: Wear rubber or neoprene gloves and a face shield when using. A rubber apron and boots are strongly recommended.
EYE PROTECTION: Wear splash-proof safety goggles especially if contact lenses are worn.
RESPIRATORY PROTECTION: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.
VENTILATION: If vapors are detected, ventilate work area by opening windows and using exhaust fans.

SECTION V - PHYSICAL DATA

BOILING POINT (F):	~ 220	SPECIFIC GRAVITY:	1.55
VAPOR PRESSURE(mmHg):	N/A	EVAPORATION RATE (=1):	N/A
VAPOR DENSITY(AIR=1):	N/A	pH(CONCENTRATE):	< 1.0
SOLUBILITY IN WATER:	COMPLETE	pH(USE DILUTION OF 1% SOLUTION):	1.0
VOC CONTENT (CONCENTRATE):	0.0%		

APPEARANCE AND ODOR: A COLORLESS LIQUID WITH NO ODOR.

(Continued on Page: 2)

MATERIAL SAFETY DATA SHEET

SECTION I — PRODUCT IDENTIFICATION

KRYLON INDUSTRIAL
31800 SOLON ROAD
SOLON, OH 44139

EMERGENCY TELEPHONE NO.
(216) 292-7400
INFORMATION TELEPHONE NO.
(800) 247-3266

DATE OF PREPARATION
20 - Jul - 94

Primers

PRIMER/KRI

SECTION II — CAS No.	HAZARDOUS INGREDIENT (percent by weight)	ACGIH TLV <STEL>	OSHA PEL <STEL>	Units	Vapor Pressure (mm Hg)	1340 Zinc Rich	All Purpose 1366 White	All Purpose 1367 Ruddy Brown	All Purpose 1368 Gray	Rust Inhibitive 1345 Yellow	Rust Inhibitive 1346 Green	1373 Sandable Filler Surface Primer
74-98-6	Propane (propellant)		1000	PPM	760.0	15	17	17	17	16	16	16
142-82-5	V. M. & P. Naphtha	300	300 <400>	PPM	12.0	1						4
108-88-3 §	Toluene	50	100 <150>	PPM (Skin)	22.0		23	27	27	6	6	
330-20-7 §	Xylene	100 <150>	100 <150>	PPM	5.9	10				12	12	16
78-83-1	2-Methyl-1-Propanol	50	50	PPM	6.7							2
78-93-3 §	Methyl Ethyl Ketone	200 <300>	200 <300>	PPM	70.0	34						
67-64-1 §	Acetone	750 <1000>	750 <1000>	PPM	760.0		34	34	34	48	48	41
7440-66-6 §	Zinc	Not Established				38						
14807-96-6	Talc	2	2	Mg/M3	as Resp. Dust					5	5	9
13463-67-7	Titanium Dioxide	10	10[5]	Mg/M3	as Dust [Resp. Fraction]		6		3			1
1317-64-1 §	Zinc Molybdate	Not Established								2	2	
	VOC as a percent by weight per BAAQMD Rule 49					59	62	60	62	63	63	62
	NFPA Code 308 Level					3	3	3	3	3	3	3
	HMIS® Ratings (Health - Flammability - Reactivity)					2-4-0	2-4-0	2-4-0	2-4-0	2-4-0	2-4-0	2-4-0

§ Ingredient subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.65 C

→→→ MSDS Text, Page Follows →→→

Section III — PHYSICAL DATA

PRODUCT WEIGHT	– N.A.	EVAPORATION RATE	– Faster than Ether
SPECIFIC GRAVITY	– N.A.	VAPOR DENSITY	– Heavier than Air
BOILING RANGE	– 49-289 °F	MELTING POINT	– N.A.
SOLUBILITY IN WATER	– N.A.		

Section IV — FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION FLASH POINT <0 °F PMCC LEL 1.0 UEL 12.8
Extremely Flammable, Flash below 20 °F
EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Explosion from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Section V — HEALTH HAZARD DATA

ROUTES OF EXPOSURE
Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.
ACUTE Health Hazards
EFFECTS OF OVEREXPOSURE
Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
EMERGENCY AND FIRST AID PROCEDURES
If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
If SWALLOWED: Get medical attention.
CHRONIC Health Hazards
No ingredient in these products is an IARC, NTP or OSHA listed carcinogen.
Methyl Ethyl Ketone may increase the nervous system effects of other solvents.
Prolonged overexposure to solvent ingredients in Section II may cause adverse effects to the liver, urinary, blood-forming, cardiovascular, and reproductive systems.
Rats exposed to titanium dioxide dust at 250 mg./M3 developed lung cancer, however, such exposure levels are not attainable in the workplace.
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Section VI — REACTIVITY DATA

STABILITY – Stable
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section II
HAZARDOUS POLYMERIZATION – Will Not Occur

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate and remove with inert absorbent.
WASTE DISPOSAL METHOD
Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Waste from products containing Methyl Ethyl Ketone and/or Zinc may also require testing for extractability.
Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section VIII — PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.
These coatings may contain materials classified as nuisance particulates (listed "as Dust" in Section II) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section II, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./M3 (total dust), OSHA PEL 15 mg./M3 (total dust), 5 mg./M3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.1PB.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section II.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section II.
PROTECTIVE GLOVES
None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

Section IX — PRECAUTIONS

DOT STORAGE CATEGORY – 1A
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Contents are EXTREMELY FLAMMABLE. Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120 °F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.
OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section X — OTHER REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65
Several products (see table) contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	Triethylene Glycol Reprocessed
Supplier	COASTAL CHEMICAL CO.,L.L.C. 3520 Veterans Memorial Drive ABBEVILLE, LA 70510 318-893-3862
Synonym	Not available.
Trade name	Not available.
Material Uses	Not available.
Manufacturer	Various

Code	93101
MSDS#	Not available.
Validation Date	3/8/96
Print Date	5/12/99
In case of Emergency	Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Joe Hudman 713-477-6675

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
Diethylene glycol	111-46-6	0-5	Not available.	ORAL (LD50) mg/kg: Acute: 12565 (Hamster.). 14800 (Rat). DERMAL (LD50) mg/kg: Acute: 11890 (Hamster.). 11900 (Rabbit).
Triethylene Glycol	112--27-6	95-100		

Section 3. Hazards Identification

Emergency Overview	CAUTION! MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.
Routes of Entry	Eye contact. Ingestion. Skin contact. Inhalation.
Potential Acute Health Effects	Slightly dangerous to dangerous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. This product may irritate eyes and skin upon contact.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS : Not available. The substance is toxic to blood, kidneys, liver. Toxicity of the product to the reproductive system: Not available. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.
Skin Contact	If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Hazardous Inhalation	No additional information.
Ingestion	DO NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

Continued on Next Page

Hazardous Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	The lowest known value is 227.78°C (442°F) (Diethylene glycol).
Flash Points	The lowest known value is CLOSED CUP: 138°C (280.4°F) OPEN CUP: 143°C (289.4°F) (Cleveland) (Diethylene glycol)
Flammable Limits	The greatest known range is LOWER: 2% UPPER: 12.3% (Diethylene glycol)
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Very slightly to slightly flammable in presence of open flames and sparks, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	When heated to decomposition, it emits acrid smoke and irritating fumes. (Diethylene glycol)
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat. Gloves (impervious).
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
2,2'-Oxydiethanol	111-46-6	Not available.
Triethylene Glycol	112-27-6	

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.
Molecular Weight	Not applicable.
pH (1% soln/water)	Neutral.

Odor	Not available.
Taste	Not available.
Color	Not available.

Boiling Point	The lowest known value is 245.8°C (474.4°F) (Diethylene glycol). Weighted average: 284.02°C (543.2°F)
Melting Point/Pour Point	May start to solidify at -5°C (23°F) based on data for: Triethylene Glycol. Weighted average: -5.09°C (22.8°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 1.12 (Water = 1)
Vapor Pressure	The highest known value is 0.01 mm of Hg (@ 20°C) (Diethylene glycol).
Vapor Density	The highest known value is 6.7 (Air = 1) (Tetraethylene glycol). Weighted average: 6.7 (Air = 1)
Volatility	Not available.
Odor Threshold	Not available.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Very slightly to slightly reactive with oxidizing agents.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): > 5000 mg/kg (Hamster.) (Calculated value for the mixture). Acute dermal toxicity (LD50): > 5000 mg/kg (Hamster.) (Calculated value for the mixture).
Chronic Effects on Humans	The substance is toxic to blood, kidneys, liver. Toxicity of the product to the reproductive system: Not available.
Other Toxic Effects on Humans	Slightly dangerous to dangerous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on other Toxic Effects on Humans	Experimentally tumorigen by inhalation. Exposure can cause nausea, headache and vomiting. (Diethylene glycol)

Continued on Next Page

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

Proper Shipping Name	NONE
DOT Classification	Not a DOT controlled material (United States).
DOT Identification Number	Not applicable (PIN and PG).
Packing Group	NONE
Hazardous Substances Reportable Quantity (kg)	Not available.
Special Provisions for Transport	Not applicable.

Section 15. Regulatory Information

Federal and State Regulations The following product(s) is (are) listed by the State of Minnesota: Diethylene glycol

Other Classifications	**WHMIS (Canada)**	Not controlled under WHMIS (Canada).
	DSCL (EEC)	Not controlled under DSCL (Europe).

Section 16. Other Information

HMIS (U.S.A.)

[illegible]	2
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)

References	Not available.
Other Special Considerations	No additional remark.

Validated by Joe Hudman on 8/8/96.

Verified by Joe Hudman.

Printed 5/12/99.

Transportation Emergency Call
CHEMTREC 800-424-9300
Other Information Call
Joe Hudman
713-477-4675

Continued on Next Page

Triethylene Glycol Reprocessed Page Number: 5

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

martyne Kieling

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
JUN 24 2002
Environmental Bureau
Oil Conservation Division

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ ☐Verbal Approval Received: Yes ☐ No ☒	4. Generator Coastal Chemical
	5. Originating Site Farmington Yard
2. Management Facility Destination Key Energy Disposal	6. Transporter Key Energy Services
3. Address of Facility Operator #345 CR 3500 Aztec New Mexico	8. State NM
7. Location of Material (Street Address or ULSTR) 1130 Madison Ln. ,Farmington NM	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

City water mixed with amounts of unused treating chemicals. See MSDS information

Estimated Volume < 200 bbls Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: Manager DATE: 06-17-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Michael Talovich TELEPHONE NO. 505-334-6186

1-20290

(This space for State Use)

APPROVED BY: _____ TITLE: Envro/ Engr DATE: 06/18/02

APPROVED BY: _____ TITLE: Environmental Geologist DATE: 06/24/02

District I - (505) 393-6161
1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S. Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD
Permitted Surface
Waste Management
Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:

Coastal Chemical C.o. LLC
1130 Madison Ln.
Farmington NM 87401

2 Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:

Rinse water from pump, hoses and tanks used to deliver chemical. All Chemicals rinsed out are virgin unused chemicals Chemicals may include Alkanolamine, Glycol (Teg & Eg) Antifreeze.

4. Location of Waste (Street address &/or ULSTR):

Coastal Chemical Co LLC
1130 Madison Lane
Farmington NM 87401

5. Destination (Surface Waste Management Facility):

Key Energy Disposal

6. Transporter:

7. Estimated Volume 160 cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

XX MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

XX **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: John Messenger Date: 6-17-02

Print Name: JOHN MESSENGER

Title: WAREHOUSEMAN

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 1-866-865-4767

Product: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE

Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

INEOS, Limited Liability Company, Plaquimine, LA 70764

Customer Information Center: 1-866-865-4767

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary ingredient		
Water	CAS# 007732-18-5	<14%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

****

* Colorless to light yellow liquid. Slight amine odor. Causes eye burns. Causes skin irritation. Toxic fumes are released in fire situations. *

****

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause severe eye irritation with corneal injury which may result in permanent impairment of vision, even blindness. Vapors or mists may cause eye irritation.

SKIN: Short single exposure may cause moderate skin irritation. Prolonged or repeated exposure may cause severe skin irritation. A single prolonged exposure is not likely to result in the material being absorbed in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause irritation of the mouth, throat, and gastrointestinal tract.

INHALATION: If material is heated or aerosol/mist is produced, concentrations may be attained that are sufficient to cause respiratory irritation.

(Continued on Page 2)

Product Name: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE
Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

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4. FIRST AID

EYE: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASH POINT: >300F
METHOD USED: SETAFlash CC

FLAMMABILITY LIMITS
LFL: Not determined.
UFL: Not determined.
AUTOIGNITION TEMPERATURE: Not determined.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to nitrogen oxides, carbon monoxide, carbon dioxide.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.

(Continued on Page 3)

Product Name: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE
Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

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5. FIRE FIGHTING MEASURES (CONTINUED)

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. This will not provide sufficient fire protection. Consider fighting fire from a remote location. For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Isolate area. May be a slipping hazard. See MSDS, Section 10, for information on stability and reactivity.

PROTECT THE ENVIRONMENT: Contain liquid to prevent contamination of soil, surface water or ground water.

CLEANUP: Clean up with absorbent material. Avoid materials such as sawdust. Collect material in suitable and properly labeled containers.

7. HANDLING AND STORAGE

HANDLING: Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

STORAGE: Keep containers tightly closed when not in use. Recommended storage in a cool, dry place away from high temperatures, hot pipes, and direct sunlight. Do not store in aluminum, brass, copper, copper alloys.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

(Continued on Page 4)

Product Name: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE
Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use chemical goggles. Eye wash fountain should be located in immediate work area. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Use gloves impervious to this material. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation.

RESPIRATORY PROTECTION: For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator.

EXPOSURE GUIDELINES: None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless to light yellow liquid.
ODOR: Slight amine.
BOILING POINT: 233.8F, 112.1C
VAPOR PRESSURE: 0.2 mmHg @ 20 C
VAPOR DENSITY: >1.0
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: 0.94 @ 20/20C
FREEZING POINT: -28F (-33C)

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See Storage, Section 7.

CONDITIONS TO AVOID: Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with halogenated hydrocarbons, nitrites, strong acid. Avoid contact with oxidizing materials. Heating above 60C in the presence of aluminum can result in corrosion and generation of flammable hydrogen gas. Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases.

(Continued on Page 5)

Product Name: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE
Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

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10. STABILITY AND REACTIVITY (CONTINUED)

HAZARDOUS DECOMPOSITION: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is 1360 mg/kg.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: Based largely or completely on data for major component(s). Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

DEGRADATION & PERSISTENCE: Based largely or completely on data for major component(s). Biodegradation may occur under aerobic conditions (in the presence of oxygen).

ECOTOXICITY: Based largely or completely on data for major component(s). Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L). Acute LC50 in golden orfe (Leuciscus idus) is 270 mg/L. Toxicity EC50 in microorganisms is 270 mg/L.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. INEOS, LIMITED LIABILITY COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS

(Continued on Page 6)

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: incinerator or other thermal destruction device.

As a service to its customers, INEOS can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone INEOS's Customer Information Center at 866-865-4767 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.):
For D.O.T. regulatory information, if required, consult transportation regulations, product shipping papers, or your INEOS representative.

CANADIAN TDG INFORMATION
For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your INEOS representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS
==========

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

(Continued on Page 7)

Product Name: GAS/SPEC (R) CS-2000 GAS TREATING SOLVENT ADDITIVE
Product Code: 60643

Effective Date: 10/27/99 Date Printed: 12/04/00 MSD: 006132

REGULATORY INFORMATION: (CONTINUED)

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
PROPRIETARY INGREDIENT	PROPRIETARY	PA1

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT

(Continued on Page 8)

REGULATORY INFORMATION: (CONTINUED)

(CERCLA, or SUPERFUND):

To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

16. OTHER INFORMATION

PRODUCT USE: Solvent for selective extraction and dissolution.

REVISION INDICATOR: Revised Sections 2, 3, 5, 9, 10 and 15.

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 1-866-865-4767

Product: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE

Product Code: 29451

Effective Date: 10/18/00 Date Printed: 12/04/00 MSD: 002850

INEOS, Limited Liability Company, Plaquimine,LA 70764

Customer Information Center: 1-866-865-4767

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary alkylamine		90 to 100%
Water	CAS# 007732-18-5	Max. 4%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

****

* Colorless liquid. Amine odor. Combustible. Causes severe eye burns. Causes skin burns. Toxic fumes are released in fire situations. *

****

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN: Short single exposure may cause skin burns. Prolonged exposure may cause severe skin burns. DOT Classification: corrosive. A single prolonged exposure may result in the material being absorbed in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of the mouth and throat. Observations in animals include liver and kidney effects.

INHALATION: At room temperature, vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause adverse effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: No relevant information found.

(Continued on Page 2)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
Product Code: 29451

Effective Date: 10/18/00 Date Printed: 12/04/00 MSD: 002850

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3. HAZARDS IDENTIFICATION (CONTINUED)

TERATOLOGY (BIRTH DEFECTS): Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.

4. FIRST AID

EYE: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: May cause tissue destruction leading to stricture. If lavage is preformed, suggest endotracheal and/or esophageal control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASH POINT: 160F, 71C.
METHOD USED: PMCC.

FLAMMABILITY LIMITS
LFL: 1.6%
UFL: 19.6%
AUTOIGNITION TEMPERATURE: 1224 F (662 C)

HAZARDOUS COMBUSTION PRODUCTS: During a fire smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to: nitrogen oxides, carbon monoxide, carbon dioxide.

(Continued on Page 3)

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5. FIRE FIGHTING MEASURES (CONTINUED)

OTHER FLAMMABILITY INFORMATION: Violent steam generation or eruption may occur upon application of direct water stream.

EXTINGUISHING MEDIA: Water fog or fine spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams are preferred if available. General purpose synthetic foams or protein foams may function, but much less effectively.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Contain fire water run-off if possible. Fire water run-off, if not contained may cause environmental damage. Review the "Protect the Environment" section under "Accidental Release Measures" of this MSDS to determine if material should be allowed to burn out or be extinguished. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. This will not provide sufficient fire protection, consider fighting fire from a remote location. For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Isolate area. May be a slipping hazard.

PROTECT THE ENVIRONMENT: Contain liquid to prevent contamination of soil, surface water or ground water.

CLEANUP: Clean up with absorbent material. Avoid materials such as sawdust. Collect material in suitable and properly labeled containers.

(Continued on Page 4)

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7. HANDLING AND STORAGE

HANDLING:
Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed.

Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

STORAGE:
Store in a tightly closed container, away from sunlight, in a cool, dry and well ventilated area. Keep away from strong acids and oxidizing materials.

Recommended material of construction of storage facility is 316 stainless steel.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use chemical goggles. Eye wash fountain should be located in immediate work area.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation. Butyl rubber, neoprene, viton or PVC materials offer superior breakthrough resistance. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Contaminated leather items, such as shoes, belts and watchbands, should be removed and destroyed.

RESPIRATORY PROTECTION: For most conditions, no respiratory protection should be needed; however, if handling at elevated

(Continued on Page 5)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

temperatures without sufficient ventilation, use an approved air-purifying respirator.

EXPOSURE GUIDELINES: None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid
ODOR: Amine
BOILING POINT: 306-324F, 152-162C
VAPOR PRESSURE: <2.5 mmHg @ 20C
VAPOR DENSITY: 2.6
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: 0.93-0.94 @ 20/20C
FREEZING POINT: -4.5C, 24F

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Product can decompose at elevated temperatures. Avoid direct sunlight.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with oxidizing materials. Avoid contact with acids, strong oxidizers.

HAZARDOUS DECOMPOSITION: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The LD50 for skin absorption in male rabbits is 1880 mg/kg. The LD50 for skin absorption in female rabbits is 1006 mg/kg.

INGESTION: The oral LD50 for rats is between 1000 and 2340 mg/kg.

(Continued on Page 6)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
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12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No data available at MSDS effective date.

DEGRADATION & PERSISTANCE: No data available at MSDS effective date.

ECOTOXICOLOGY: No data available at MSDS effective date.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. INEOS, LIMITED LIABILITY COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: incinerator or other thermal destruction device.

As a service to its customers, INEOS can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone INEOS's Customer Information Center at 866-865-4767 for further details.

14. TRANSPORT INFORMATION

UNITED STATES DOT INFORMATION

For DOT regulatory information, if required, consult transportation regulations, product shipping papers, or your INEOS representative.

CANADIAN TDG INFORMATION

(Continued on Page 7)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
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14. TRANSPORT INFORMATION (CONTINUED)

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your INEOS representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS
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SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

(Continued on Page 8)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
Product Code: 29451

Effective Date: 10/18/00 Date Printed: 12/04/00 MSD: 002850

REGULATORY INFORMATION: (CONTINUED)

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
PROPRIETARY INGREDIENT	PROPRIETARY	PA1

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):

To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

CANADIAN REGULATIONS
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WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

B3 - combustible liquid with a flash point between 37.8C and 93.3C
E - corrosive to metal or skin
Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

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CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

(Continued on Page 9)

Product Name: GAS/SPEC* CS-PLUS SOLVENT ADDITIVE
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Effective Date: 10/18/00 Date Printed: 12/04/00 MSD: 002850

REGULATORY INFORMATION: (CONTINUED)

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HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:	CAS #	AMOUNT(%w/w)
Proprietary alkylamine		90-100%

HMIRA INFORMATION: A claim for exemption from ingredient disclosure has been approved under the Hazardous Materials Information Review Act (Canada). The Hazardous Materials Information Review Commission registry number, and date, assigned to this claim are:

Claim Registry Number: 4842 Filing Date: September 8, 2000

16. OTHER INFORMATION

PRODUCT USE: Developmental solvent for selective extraction and dissolution.

REVISION INDICATOR: Revised Section 15, Canadian regulatory information.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**Coastalguard 100**
Supplier	COASTAL CHEMICAL CO.,L.L.C. 3520 Veterans Memorial Drive ABBEVILLE, LA 70510 318-893-3862
Synonym	Not available.
Trade name	Not available.
Material Uses	Industrial applications: Coolant and antifreeze.
Manufacturer	Coastal Chemical Co., Inc. 3520 Veterans Memorial Drive Abbeville, La.

Code	37252
MSDS#	Not available.
Validation Date	8/8/96
Print Date	6/2/99

In case of Emergency	Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Joe Hudman 713-477-6675

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
Ethylene Glycol	107-21-1	95	CEIL: 39.4 (ppm) CEIL: 100 (mg/m^3)	ORAL (LD50) mg/kg: Acute: 4700 (Rat). DERMAL (LD50) mg/kg: Acute: 9530 (Rabbit.).

Section 3. Hazards Identification

Emergency Overview

[illegible]

HARMFUL if INHALED. HARMFUL IF SWALLOWED. [illegible]

Repeated or prolonged exposure to the substance can produce target [illegible]

Routes of Entry

Ingestion.

Potential Acute Health Effects

Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation. This product may irritate eyes and skin upon contact.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. The substance is toxic to kidneys, the nervous system, the reproductive system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

Eye Contact

IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.

Skin Contact

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Continued on Next Page

Hazardous Skin Contact	No additional information.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Hazardous Inhalation	No additional information.
Ingestion	DO NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.
Hazardous Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	The lowest known value is 398°C (748.4°F) (Ethylene Glycol).
Flash Points	The lowest known value is CLOSED CUP: 116°C (240.8°F) OPEN CUP: 232°C (240.8°F) (Cleveland) (Ethylene Glycol)
Flammable Limits	The greatest known range is LOWER: 3.2% UPPER: 15.3% (Ethylene Glycol)
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Very slightly to slightly flammable in presence of open flames and sparks, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	When heated to decomposition, it emits acrid smoke and irritating fumes. (Ethylene Glycol)
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Continued on Next Page

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engeneering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat. Gloves (impervious). Wear appropriate respirator when ventilation is inadequate.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
1,2-Ethanediol	107-21-1	CEIL: 39.4. (ppm) CEIL: 100 (mg/m^3)

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.
Molecular Weight	Not applicable.
pH (1% soln/water)	8 to 10 [Basic.]

Odor	Not available.
Taste	Not available.
Color	Green. (Dark.)

Boiling Point	The lowest known value is 198°C (388.4°F) (Ethylene Glycol).
Melting Point/Pour Point	May start to solidify at -13.5°C (7.7°F) based on data for: Ethylene Glycol.
Critical Temperature	Not available.
Specific Gravity	The only known value is 1.12 (Water = 1) (Ethylene Glycol).
Vapor Pressure	The highest known value is 0.05 mm of Hg (@ 20°C) (Ethylene Glycol).
Vapor Density	The highest known value is 2.1 (Air = 1) (Ethylene Glycol).
Volatility	Not available.
Odor Threshold	Not available.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Very slightly soluble in n-octanol.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Slightly reactive to reactive with oxidizing agents, alkalis.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Continued on Next Page

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 4700 mg/kg (Rat) Acute dermal toxicity (LD50): > 5000 mg/kg (Rabbit.)
Chronic Effects on Humans	The substance is toxic to kidneys, the nervous system, the reproductive system, liver.
Other Toxic Effects on Humans	Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation.
Special Remarks on Toxicity to Animals	Toxic for humans or animal life. (Ethylene Glycol)
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on other Toxic Effects on Humans	Exposure can cause nausea, headache and vomiting. (Ethylene Glycol)

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal	

Section 14. Transport Information

Propper Shipping Name	Drums - Not Regulated Bulk (> 535 gals.) - Regulated Other Regulated Substances, liquid, n.o.s.
DOT Classification	DOT CLASS 9: Miscellaneous hazardous material.
DOT Identification Number	NA3082
Packing Group	III
Hazardous Substances Reportable Quantity (kg)	5000
Special Provisions for Transport	No additional remark.

Continued on Next Page

Section 15. Regulatory Information

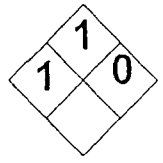
Federal and State Regulations	The following product(s) is (are) listed on SARA 313: , **Ethylene Glycol** The following product(s) is (are) listed by the State of Massachusetts: **Ethylene Glycol** The following product(s) is (are) listed on TSCA: **Ethylene Glycol**	
Other Classifications	WHMIS (Canada)	WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
	DSCL (EEC)	Not controlled under DSCL (Europe).

Section 16. Other Information

HMIS (U.S.A.)

Health Hazard	*	2
Fire Hazard		1
Reactivity		0
Personal Protection		B

National Fire Protection Association (U.S.A.)



References	Not available.
Other Special Considerations	No additional remark.

Validated by Joe Hudman on 8/8/96.

Verified by Joe Hudman.

Printed 6/2/99.

Transportation Emergency Call
CHEMTREC 800-424-9300
Other Information Call
Joe Hudman
713-477-6675

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 1-866-865-4767

Product: GAS/SPEC* SS SELECTIVE SOLVENT VARIABLE FF

Product Code: 38377

Effective Date: 03/15/99 Date Printed: 12/04/00 MSD: 003135

INEOS, Limited Liability Company, Plaquimine, LA 70764

Customer Information Center: 1-866-865-4767

2. COMPOSITION/INFORMATION ON INGREDIENTS

Methyldiethanolamine	CAS# 000105-59-9	25-50%
Water, demineralized	CAS# 007732-18-5	50-75%
Proprietary additive		<1%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

****
* Pale straw colored liquid, amine odor. Toxic fumes are rleased in *
* fire situations. *
* *
****

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight irritation with corneal injury.

SKIN: Prolonged contact is essentially nonirritating to skin. Repeated exposure may cause skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract.

4. FIRST AID

EYE: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

(Continued on Page 2)

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4. FIRST AID (CONTINUED)

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if affects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASH POINT: >200F
METHOD USED: PMCC
AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABILITY LIMITS
LFL: Not determined.
UFL: Not determined.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions polymers decompose. The smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA: Water fog or fine spray, carbon dioxide, dry chemical, or foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if availabile. Alcohol resistant foams (ATC type) may function.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Contain fire water run-off if possible. Fire water run-off, if not contained may cause environmental damage. Review the "Protect the Environmental" section under "Accidental Release Measures" of this MSDS to determine if material should be allowed to burn out or be extinguished.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire

(Continued on Page 3)

5. FIRE FIGHTING MEASURES (CONTINUED)

fighting clothing (includes fire fighting helmet, coat, pants, boots and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Clear non-emergency personnel from area.

PROTECT THE ENVIRONMENT: Keep out of sewers, storm drains, surface waters and soil.

CLEANUP: Contain spill if possible. Clean up with absorbant materials.

7. HANDLING AND STORAGE

HANDLING: Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld or perform similar operation on or near empty containers.

STORAGE: Keep containers closed when not in use. Store in cool dry place with adequate ventilation. Do not store near heat or open flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use chemical goggles.

SKIN PROTECTION: Use gloves impervious to this material when prolonged or frequently repeated contact could occur.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying repirator.

EXPOSURE GUIDELINE(S): None established.

(Continued on Page 4)

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Pale straw liquid.
ODOR: Amine odor.
VAPOR PRESSURE: <20 mmHg @ 25C
VAPOR DENSITY: 4
BOILING POINT: 104C
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY: 1.03-1.04

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATABILITY WITH OTHER MATERIALS: Avoid contact with strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to: carbon monoxide, nitrogen oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The LD50 for skin absorption in rabbits is expected to be >6000 mg/kg.

INGESTION: The oral LD50 for rats is expected to be >2000 mg/kg.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: Based on information for methydiethanolamine. Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3).

DEGRADATION & PERSISTENCE: Based on information for methyldiethanolamine. Biodegradation under aerobic static

(Continued on Page 5)

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12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call

laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). Biodegradation rate may increase in soil and/or water with acclimation.

ECOTOXICITY: Based on information for methydiethanolamine. Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. INEOS, LIMITED LIABILITY COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, INEOS can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone INEOS's Customer Information Center at 866-865-4767 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION:
For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your INEOS representative.

(Continued on Page 6)

Product Name: GAS/SPEC* SS SELECTIVE SOLVENT VARIABLE FF
Product Code: 38377

Effective Date: 03/15/99 Date Printed: 12/04/00 MSD: 003135

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15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS
==========

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

New Jersey
Pennsylvania

(Continued on Page 7)

Product Name: GAS/SPEC* SS SELECTIVE SOLVENT VARIABLE FF
Product Code: 38377

Effective Date: 03/15/99 Date Printed: 12/04/00 MSD: 003135

REGULATORY INFORMATION:(CONTINUED)

CANADIAN REGULATIONS
==========

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 13, Disposal.

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**Ethylene glycol**
Supplier	**COASTAL CHEMICAL CO.,L.L.C.** **3520 Veterans Memorial Drive** **ABBEVILLE, LA 70510** **318-893-3862**
Synonym	Glycol
Trade name	Not available.
Material Uses	Coatings: Manufacture of asphalt-emulsion paints. Industrial applications: Coolant and antifreeze. Petrochemical industry: Manufacture of brakes fluid. Textile industry: Textile processing. Leather dyeing.
Manufacturer	Various

Code	Not available.
MSDS#	Not available.
Validation Date	**08/08/1996**
Print Date	12/14/1999

In case of Emergency: 1-800-424-9300 (Chemtrec)

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
1) Ethylene glycol	107-21-1	100	**CEIL:** 39.4 (ppm) **CEIL:** 100 (mg/m^3)	**ORAL (LD50)** mg/kg: Acute: 4700 (Rat). **DERMAL (LD50)** mg/kg: Acute: 9530 (Rabbit.).

Section 3. Hazards Identification

Emergency Overview

CAUTION!

HARMFUL IF INHALED. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. Repeated or prolonged exposure to the substance can produce kidney damage.

Routes of Entry

Ingestion.

Potential Acute Health Effects

Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation. Severe over-exposure can result in death. Can be fatal if inhaled or ingested. This product may irritate eyes and skin upon contact.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. The substance is toxic to kidneys, the nervous system, the reproductive system, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4. First Aid Measures

Eye Contact

IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.

Skin Contact

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Hazardous Skin Contact

No additional information.

Continued on Next Page

Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Hazardous Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion	DO NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.
Hazardous Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	398°C (748.4°F)
Flash Points	CLOSED CUP: 116°C (240.8°F) OPEN CUP: 232°C (449.6°F) (Cleveland)
Flammable Limits	LOWER: 3.2% UPPER: 15.3%
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Very slightly to slightly flammable in presence of open flames and sparks, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	When heated to decomposition, it emits acrid smoke and irritating fumes.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container.
Large Spill	Combustible material. Poisonous liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. DO NOT get water inside container. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Call for assistance on disposal.

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place.Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

Continued on Next Page

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engeneering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat. Gloves. Wear appropriate respirator when ventilation is inadequate.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
1) 1,2-Ethanediol	107-21-1	CEIL: 39.4 (ppm) CEIL: 100 (mg/m³)

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid. (Clear viscous liquid.)
Molecular Weight	62.07g/mole
pH (1% soln/water)	7

Odor	Odorless. (Slight.)
Taste	Sweet.
Color	Clear, colorless, syrupy liquid; hygroscopic (absorbs moisture from the (Light.)

Boiling Point	198°C (388.4°F)
Melting Point/Pour Point	-13.5°C (7.7°F)
Critical Temperature	Not available.
Specific Gravity	1.12 (Water = 1)
Vapor Pressure	0.05 mm of Hg (@ 20°C)
Vapor Density	2.1 (Air = 1)
Volatility	Not available.
Odor Threshold	Not available.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Very slightly soluble in n-octanol.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Slightly reactive to reactive with oxidizing agents, alkalis.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Continued on Next Page

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 4700 mg/kg (Rat). Acute dermal toxicity (LD50): 9530 mg/kg (Rabbit.).
Chronic Effects on Humans	**CARCINOGENIC EFFECTS:** Classified A5 (Not suspected for human.) by ACGIH. The substance is toxic to kidneys, the nervous system, the reproductive system, liver.
Other Toxic Effects on Humans	Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation.
Special Remarks on Toxicity to Animals	Toxic for humans or animal life.
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on other Toxic Effects on Humans	Exposure can cause nausea, headache and vomiting.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal	Follow local, state, and federal guidelines.

Section 14. Transport Information

Propper Shipping Name	Drums - Not Regulated Bulk (> 535 gals.) - Regulated Other Regulated Substances, liquid, n.o.s.,(ethylene Glycol)
DOT Classification	DOT CLASS 9: Miscellaneous hazardous material.
DOT Identification Number	NA3082
Packing Group	III
Hazardous Substances Reportable Quantity (kg)	2268
Special Provisions for Transport	No additional remark.

Continued on Next Page

Section 15. Regulatory Information

Federal and State Regulations	The following product(s) is (are) listed on SARA 313: , **Ethylene glycol** The following product(s) is (are) listed by the State of Massachusetts: **Ethylene glycol** The following product(s) is (are) listed on TSCA: **Ethylene glycol**	
Other Classifications	WHMIS (Canada)	WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
	DSCL (EEC)	R26/28- Very toxic by inhalation and if swallowed.

Section 16. Other Information

HMIS (U.S.A.)

*	2
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)

References

-SAX, N.I. Dangerous Properties of Indutrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.
-The Sigma-Aldrich Library of Chemical Safety Data, Edition II.

Other Special Considerations: No additional remark.

Validated by Joe Hudman on 08/08/1996.

Verified by Joe Hudman.

Printed 12/14/1999.

1-800-424-9300 (Chemtrec)

HUNTSMAN # MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

PRODUCT CODE AND NAME : DEALFG DIETHANOLAMINE LFG-85%
DATE ISSUED : 1/29/2002
DATE PRINTED : 3/14/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

PRODUCT CODE AND NAME

DEALFG DIETHANOLAMINE LFG-85%

Chemical Name and/or Family or Description:

Alkanolamine

COMPANY INFORMATION

Huntsman Petrochemical Corporation
P.O. Box 27707
Houston, TX 77227-7707

TELEPHONE NUMBERS
Transportation Emergency
Company: (409) 727-0831
CHEMTREC: (800) 424-9300
Medical Emergency: (409) 722-9673 (24 Hour)
General MSDS Assistance: (713) 235-6432
Technical Information: (512) 459-6543

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.
Product and/or Component(s) Carcinogenic According to:

OSHA____ IARC____ NTP____ OTHER____ NONE__X__

Composition:

Chemical Name	CAS Number	Exposure Limits	Range in %
Ethanol, 2,2'-iminobis- (Common name - Diethanolamine)	111-42-2	2 mg/m³ TWA-ACGIH (SKIN)	80.00 - 94.99
Water	7732-18-5		10.00 - 19.99

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200).

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

Light pale liquid

Odor:

Ammonia-like

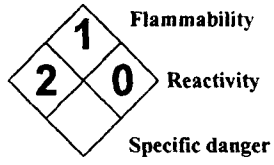
WARNING STATEMENT

WARNING ! CAUSES EYE IRRITATION
MAY CAUSE SKIN IRRITATION
MAY CAUSE BLOOD EFFECTS, LIVER, AND KIDNEY DAMAGE - BASED ON ANIMAL DATA
DO NOT ADD NITRITES - MAY FORM SUSPECTED CANCER CAUSING NITROSAMINES

Hazardous Material Information System (United States)

Health	3
Fire	1
Reactivity	0
Personal protection	

National Fire Protection Association NFPA (United States)



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye__X__ Skin__X__ Inhalation__X__ Ingestion____

Effects of Overexposure

Acute:

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as marked excess redness and swelling of the eye with injury to the cornea.

Skin: May cause irritation with discomfort, and seen as local redness and possible swelling. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation: Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Ingestion: Moderately toxic. May cause abdominal discomfort, nausea, vomiting, and diarrhea.

Sensitization Properties: Unknown

Chronic:

Repeated skin contact may cause a persistent irritation or dermatitis.

Medical Conditions Aggravated by Exposure:

Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition). Repeated overexposure may aggravate existing liver or kidney disease.

Other Remarks:

This product contains one or more amines which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

4. FIRST AID MEASURES

Eyes:

Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

Skin:

Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing and shoes. Get medical attention if skin irritation persists or skin contact has been prolonged.

Ingestion:

If patient is conscious and can swallow, give two glasses of water (16 oz.). Induce vomiting as directed by medical personnel. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

Inhalation:

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Other Instructions:

None

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

Not determined.

Flash Point (degrees C):

148.9 (300°F) (PMCC)

Flammable Limits % (Lower-Upper):

Lower: ~1
Upper: ~10

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Special Protective Equipment for Firefighters:

Wear full protective clothing and positive pressure breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Minimum feasible handling temperatures should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

Skin Protection:

Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates should be worn. Exposed workers should wash exposed skin several times daily with soap and water.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Adequate to meet component occupational exposure limits (see Section 2).

Exposure Limit for the Total Product:

None established for product; refer to Section 2 for component exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Light pale liquid

Odor:

Ammonia-like

Boiling Point (degrees C):

Not determined.

Melting/Freezing Point (degrees C):

0 (32°F)

Specific Gravity (water=1):

1.09

pH:

11.8 [Basic]

Vapor Pressure:

Not determined.

Viscosity:

Not determined.

VOC Content:

Not determined.

Vapor Density (Air=1):

Not determined.

Solubility in Water (%):

>10 [Soluble]

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air____ Water____ Heat____ Strong Oxidizers____ Others__X__ None of these____

Comments:

This material reacts violently with acids. This material is incompatible with strong oxidizing agents. This material is corrosive to copper, zinc, aluminum and thier alloys. Do not add or formulate with nitrites. See Section 16, OTHER INFORMATION.

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral:

LD50 Similar product 1.41 g/kg (rat) moderately toxic

Inhalation:

Not determined.

Dermal:

LD50 Similar product >5.00 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

Skin:
(Draize) Believed to be > 3.00 - 5.00 /8.0 (rabbit) moderately irritating
Eyes:
(Draize) Believed to be 50.00 - 80.00 /110 (rabbit) severely irritating
Sensitization:
Not determined.

Other:

Diethanolamine Carcinogenicity:
In a chronic (two year) exposure study, sponsored by the National Toxicology Program (NTP), rats and mice were dermally exposed to Diethanolamine (DEA). Both male and female mice showed an increased incidence of liver tumors, and male mice showed an increased incidence of kidney tumors. In contrast, male and female rats did not show any increased incidence of tumors. NTP concluded, using their standard classification scheme, that there is "no evidence" of cancer in male and female rats, and "clear evidence" of liver and kidney cancer in male mice, and "clear evidence" of liver cancer in female mice.

The American Chemistry Council (ACC) Alkanolamines Panel, with the cooperation of the NTP, investigated the conduct of this study and concluded that the experimental design of the study was seriously flawed in a number of areas. In addition, the results of the NTP study are not consistent with other scientific studies investigating the carcinogenic potential of DEA. The flawed experimental design, as well as the inconsistency of the NTP mouse study results with other studies, have resulted in questions over the relevance of the NTP study to establish the risk of cancer in humans from exposures to DEA.

The ACC Alkanolamines Panel is currently sponsoring mechanistic research on DEA, investigating the role of non-genotoxic mechanisms of carcinogenicity as applied to the DEA exposures in the NTP study. Results from this research program indicate that mice administered DEA via dermal (and oral) routes of exposure had significantly lower levels of choline and phosphocholine. Other research has shown that rodents chronically fed choline deficient diets, resulting in a choline/phosphocholine deficiency, develop liver tumors. In addition, due to the known differences in metabolism between rodents and humans, rodents are expected to be far more sensitive to the effects of choline depletion than humans. Although additional research in this area is still underway, the results to date of our research program indicate that the tumors observed in the NTP mouse study resulted from a mechanism that is not relevant to humans.

Diethanolamine Developmental and Reproductive Toxicity:
Laboratory animal studies investigating the developmental toxicity of DEA have indicated that DEA exposures, either oral (gavage) or dermal, do not result in any specific developmental toxicity. Although some minor developmental delays were observed in rat dermal exposure studies, these effects were secondary to extreme maternal toxicity from exposure to relatively high levels of DEA.

12. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks:

None

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:
Environmentally hazardous substances, liquid, n.o.s. (Diethanolamine)

Hazard Class:
9

Identification Number:
UN3082

Packing Group:
III

Label Required:
Class 9

Depending on container size, spills of this product may require reporting under SARA 304 and/or CERCLA 102(A) regulations. Please refer to Sections 2 and 14 of MSDS for composition and component RQ information.

IMDG

Proper Shipping Name:
ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (diethanolamine)

Hazard Class
9

Identification Number
UN3082

Packing Group
III

Label Required
Class 9

ICAO

Proper Shipping Name:
Environmentally hazardous substances, liquid, n.o.s. (Diethanolamine)

Hazard Class
9

Identification Number
UN3082

Packing Group
III

Label Required
Class 9

TDG

Proper Shipping Name:
Not regulated.

Hazard Class:
Not regulated.

Identification Number:
Not regulated.

Label Required:
Not regulated.

14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Chemical Name	CAS Number	Range in %	TPQ	RQ
None.				

Section 311 Hazardous Categorization:
Acute__X__ Chronic__X__ Fire____ Pressure____ Reactive____ N/A____

Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
Ethanol, 2,2'-iminobis- (Common name - Diethanolamine)	111-42-2	80.00-94.99

CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
Ethanol, 2,2'-iminobis- (Common name - Diethanolamine)	111-42-2	80.00-94.99	100

States Right-to-Know Regulations:

Chemical Name	State Right-to-know
Ethanol, 2,2'-iminobis- (Common name - Diethanolamine)	CT, FL, IL, MA, NJ, PA, RI

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

California Prop. 65:
The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
None.	

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:
This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification:
Class D, Div 2, Subdiv B: Irritant

Canadian Inventory Status:
This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:
This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japan Ministry of International Trade and Industry (MITI) inventory.

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

DEA is expected to have low toxicity to aquatic species.

Mobility:

DEA is not expected to selectively partition and absorb to soil or sediments.

Persistence and Biodegradability:

DEA is readily biodegradable and is not expected to persist in the environment.

Potential to Bioaccumulate:

DEA is not expected to bioaccumulate (log K_{ow} = -1.43).

Remarks:

None

16. OTHER INFORMATION 1/29/2002

Do not add nitrites. This product contains amines which can combine with nitrites or other nitrosating agents to form nitrosamines. Many nitrosamines have been found to cause cancer in laboratory animals.

A component of this product carries "SKIN" notation in Section 2 as part of its exposure limit. "SKIN" notation indicates possible adverse health effects as a result of absorption through the skin, mucous membranes, and eyes, by contact with vapor, mist, spray, or liquid. Appropriate measures should be taken to minimize contact.

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

Supercedes: 8/8/2000

The following sections have been revised: 2, 3, 8, 9, 10, 11, 13, 14

Date Issued: 1/29/2002.

Inquiries regarding MSDS should be directed to:

HUNTSMAN
Coordinator, Product Safety
P.O. Box 27707
Houston, TX 77227-7707

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED
MAR 0 4 2002
Environmental Bureau
Oil Conservation Division

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒	4. Generator KEY ENERGY
Verbal Approval Received: Yes ☐ No ☒	5. Originating Site FARMINGTON YARD
2. Management Facility Destination KEY ENERGY DISPOSAL	6. Transporter Key
3. Address of Facility Operator #349 CR 3500 AZTEC, NM	8. State NM
7. Location of Material (Street Address or ULSTR) 5651 US Highway 64 FARMINGTON, NM 87401	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER FROM OIL FIELD EQUIPMENT

FEB 2002
RECEIVED
OIL CONS. DIV.
DIST. 3

Estimated Volume 120 66ls PER MONTH cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: Mgr DATE: 2-25-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6416

(This space for State Use)

APPROVED BY: _____ TITLE: Enviro/ Engr DATE: 02/27/02

APPROVED BY: _____ TITLE: Environmental Geologist DATE: 3-4-02

030402-1

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Key Energy Services, Inc. Four Corners Divison 5651 US Highway 64 Farmington, NM 87401	2. Destination Name: Key Energy Services, Disposal San Juan Country, NM
3. Originating Site (name): Key Energy Services, Inc. Four Corners Divison 5651 US Highway 64 Farmington, NM 87401 attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): Farmington Facility Waste Water Storage Tank
4. Source and Description of Waste Oilfield Service Equipment Waste Wash Water	

I, **Bob James** representative for **Key Energy Services, Four Corners Division** do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,1988, regulatory determination, the above described waste is: (Check appropriate classification)

___**EXEMPT** oilfield waste

X **NON-EXEMPT** oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non –hazardous waste defined above.

For **NON-EXEMPT** waste the following documentation is attached (check appropriate items):

___MSDS Information
X RCRA Hazardous Waste Analysis
X Chain of Custody
___Other (description

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature):

Title: **Equipment & Environmental Manager**

Date: **February 24, 2002**

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-001
Sample ID:	Wash Water Tank	Date Reported:	02-19-02
Lab ID#:	22038	Date Sampled:	02-14-02
Sample Matrix:	Water	Date Received:	02-14-02
Preservative:	Cool	Date Analyzed:	02-15-02
Condition:	Cool and Intact	Chain of Custody:	8917

Parameter	Result	
IGNITABILITY:	**Negative**	
CORROSIVITY:	**Negative**	**pH = 8.25**
REACTIVITY:	**Negative**	

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. *(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)*
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. *(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)*
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. *(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)*
Reference:	40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.
Comments:	**5651 US Hwy 64, Farmington, NM.**

Christine M Walters
Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-001
Sample ID:	Wash Water Tank	Date Reported:	02-19-02
Laboratory Number:	22038	Date Sampled:	02-14-02
Chain of Custody:	8917	Date Received:	02-14-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	02-19-02
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0062	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0018	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **5651 US Hwy 64, Farmington, NM.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS

Client:	Key Energy	Project #:	98065-001
Sample ID:	Wash Water Tank	Date Reported:	02-20-02
Laboratory Number:	22038	Date Sampled:	02-14-02
Chain of Custody:	8917	Date Received:	02-14-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	02-20-02
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **5651 US Hwy 64, Farmington, NM.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Key Energy	Project #:	98065-001
Sample ID:	Wash Water Tank	Date Reported:	02-20-02
Laboratory Number:	22038	Date Sampled:	02-14-02
Chain of Custody:	8917	Date Received:	02-14-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	02-20-02
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.020**	**5.0**
Hexachloroethane	**ND**	**0.020**	**3.0**
Nitrobenzene	**0.133**	**0.020**	**2.0**
Hexachlorobutadiene	**ND**	**0.020**	**0.5**
2,4-Dinitrotoluene	**0.082**	**0.020**	**0.13**
HexachloroBenzene	**ND**	**0.020**	**0.13**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	**97%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **5651 US Hwy 64, Farmington, NM.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-001
Sample ID:	Wash Water Tank	Date Reported:	02-19-02
Laboratory Number:	22038	Date Sampled:	02-14-02
Chain of Custody:	8917	Date Received:	02-14-02
Sample Matrix:	Water	Date Analyzed:	02-19-02
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	**0.011**	**0.001**	**5.0**
Barium	**0.222**	**0.001**	**100**
Cadmium	**0.011**	**0.001**	**1.0**
Chromium	**0.062**	**0.001**	**5.0**
Lead	**0.144**	**0.001**	**5.0**
Mercury	**ND**	**0.001**	**0.2**
Selenium	**0.006**	**0.001**	**1.0**
Silver	**ND**	**0.001**	**5.0**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **5651 US Hwy 64, Farmington, NM.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	02-19-02
Laboratory Number:	02-19-TCV	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-19-02
Condition:	N/A	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	02-19-02
Laboratory Number:	02-14-TCV	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-19-02
Condition:	N/A	Date Extracted:	02-14-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99%
	1,4-difluorobenzene	98%
	4-bromochlorobenzene	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	02-19-02
Laboratory Number:	22037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	02-19-02
Condition:	N/A	Date Extracted:	02-14-02

Parameter	Sample Result (mg/L)	Duplicate Sample Result (mg/L)	Detection Limits (mg/L)	Percent Difference
Vinyl Chloride	**ND**	**ND**	**0.0001**	**0.0%**
1,1-Dichloroethene	**ND**	**ND**	**0.0001**	**0.0%**
2-Butanone (MEK)	**0.0087**	**0.0087**	**0.0001**	**0.0%**
Chloroform	**ND**	**ND**	**0.0001**	**0.0%**
Carbon Tetrachloride	**ND**	**ND**	**0.0001**	**0.0%**
Benzene	**0.0018**	**0.0018**	**0.0001**	**0.0%**
1,2-Dichloroethane	**ND**	**ND**	**0.0001**	**0.0%**
Trichloroethene	**ND**	**ND**	**0.0003**	**0.0%**
Tetrachloroethene	**ND**	**ND**	**0.0005**	**0.0%**
Chlorobenzene	**ND**	**ND**	**0.0003**	**0.0%**
1,4-Dichlorobenzene	**ND**	**ND**	**0.0002**	**0.0%**

ND - Parameter not detected at the stated detection limit.

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spike	Date Reported:	02-19-02
Laboratory Number:	22037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	02-19-02
Condition:	N/A	Date Extracted:	02-14-02

Parameter	Sample Result (mg/L)	Spike Added (mg/L)	Spiked Sample Result (mg/L)	Det. Limit (mg/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Vinyl Chloride	ND	0.050	0.0495	0.0001	99%	28-163
1,1-Dichloroethene	ND	0.050	0.0494	0.0001	99%	43-143
2-Butanone (MEK)	0.0087	0.050	0.0577	0.0001	98%	47-132
Chloroform	ND	0.050	0.0500	0.0001	100%	49-133
Carbon Tetrachloride	ND	0.050	0.0490	0.0001	98%	43-143
Benzene	0.0018	0.050	0.0513	0.0001	99%	39-150
1,2-Dichloroethane	ND	0.050	0.0490	0.0001	98%	51-147
Trichloroethene	ND	0.050	0.0495	0.0003	99%	35-146
Tetrachloroethene	ND	0.050	0.0495	0.0005	99%	26-162
Chlorobenzene	ND	0.050	0.0495	0.0003	99%	38-150
1,4-Dichlorobenzene	ND	0.050	0.0495	0.0002	99%	42-143

ND - Parameter not detected at the stated detection limit.

References:
Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

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ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report
Laboratory Blank

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	02-20-02
Laboratory Number:	02-20-TCA	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-20-02
Condition:	N/A	Analysis Requested:	TCLP

Analytical Results Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	**ND**	**0.020**	**200**
p,m-Cresol	**ND**	**0.040**	**200**
2,4,6-Trichlorophenol	**ND**	**0.020**	**2.0**
2,4,5-Trichlorophenol	**ND**	**0.020**	**400**
Pentachlorophenol	**ND**	**0.020**	**100**

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorophenol	**98 %**
	2,4,6-tribromophenol	**99 %**

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	02-20-02
Laboratory Number:	02-14-TCA-MB	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Date Analyzed:	02-20-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040
PHENOLS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	02-20-02
Laboratory Number:	22037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	02-14-02
Condition:	Cool & Intact	Date Analyzed:	02-20-02
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Detection Limit (mg/L)	Percent Difference
o-Cresol	**ND**	**ND**	**0.020**	**0.0%**
p,m-Cresol	**ND**	**ND**	**0.040**	**0.0%**
2,4,6-Trichlorophenol	**ND**	**ND**	**0.020**	**0.0%**
2,4,5-Trichlorophenol	**ND**	**ND**	**0.020**	**0.0%**
Pentachlorophenol	**ND**	**ND**	**0.020**	**0.0%**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
	8040 Compounds	**30.0%**

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	02-20-02
Laboratory Number:	02-20-TBN	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	02-20-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.020**	**5.0**
Hexachloroethane	**ND**	**0.020**	**3.0**
Nitrobenzene	**ND**	**0.020**	**2.0**
Hexachlorobutadiene	**ND**	**0.020**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.020**	**0.13**
HexachloroBenzene	**ND**	**0.020**	**0.13**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	**100%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	02-20-02
Laboratory Number:	02-14-TBN-MB	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	02-14-02
Condition:	Cool and Intact	Date Analyzed:	02-20-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	**ND**	**0.020**	**5.0**
Hexachloroethane	**ND**	**0.020**	**3.0**
Nitrobenzene	**ND**	**0.020**	**2.0**
Hexachlorobutadiene	**ND**	**0.020**	**0.5**
2,4-Dinitrotoluene	**ND**	**0.020**	**0.13**
HexachloroBenzene	**ND**	**0.020**	**0.13**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	**100%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QA/QC Matrix Duplicate Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	02-20-02
Laboratory Number:	22037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Extracted:	02-14-02
Condition:	N/A	Date Analyzed:	02-20-02
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Percent Difference	Det. Limit (mg/L)
Pyridine	**ND**	**ND**	**0.0%**	**0.020**
Hexachloroethane	**ND**	**ND**	**0.0%**	**0.020**
Nitrobenzene	**0.102**	**0.101**	**0.0%**	**0.020**
Hexachlorobutadiene	**ND**	**ND**	**0.0%**	**0.020**
2,4-Dinitrotoluene	**0.034**	**0.034**	**0.0%**	**0.020**
HexachloroBenzene	**ND**	**ND**	**0.0%**	**0.020**

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Maximum Difference
	8090 Compounds	**30%**

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02-19-TCM QA/QC	Date Reported:	02-19-02
Laboratory Number:	22037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	02-19-02
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	**ND**	**ND**	**0.001**	**0.046**	**0.046**	**0.0%**	**0% - 30%**
Barium	**ND**	**ND**	**0.001**	**0.267**	**0.265**	**0.7%**	**0% - 30%**
Cadmium	**ND**	**ND**	**0.001**	**0.039**	**0.039**	**0.0%**	**0% - 30%**
Chromium	**ND**	**ND**	**0.001**	**0.149**	**0.147**	**1.3%**	**0% - 30%**
Lead	**ND**	**ND**	**0.001**	**0.283**	**0.280**	**1.1%**	**0% - 30%**
Mercury	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**
Selenium	**ND**	**ND**	**0.001**	**0.024**	**0.024**	**0.0%**	**0% - 30%**
Silver	**ND**	**ND**	**0.001**	**ND**	**ND**	**0.0%**	**0% - 30%**

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	**0.500**	**0.046**	**0.545**	**99.8%**	**80% - 120%**
Barium	**0.500**	**0.267**	**0.763**	**99.5%**	**80% - 120%**
Cadmium	**0.500**	**0.039**	**0.537**	**99.6%**	**80% - 120%**
Chromium	**0.500**	**0.149**	**0.647**	**99.7%**	**80% - 120%**
Lead	**0.500**	**0.283**	**0.781**	**99.7%**	**80% - 120%**
Mercury	**0.050**	**ND**	**0.049**	**98.0%**	**80% - 120%**
Selenium	**0.500**	**0.024**	**0.523**	**99.8%**	**80% - 120%**
Silver	**0.500**	**ND**	**0.499**	**99.8%**	**80% - 120%**

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission, SW-846, USEPA, December 1996.

Comments: **QA/QC for samples 22037 - 22039 and 22041.**

Analyst

Review

CHAIN OF CUSTODY RECORD

08917

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
Key Energy	5651 US Hwy 64 Farmington, NM	
Sampler: Harlan M. Brown	Client No. 98065-001	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TCLP w/o H&P						Remarks
Wash Water Tank	02-14-02	11:40	22038	Water	4	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Harlan M Brown	02-14-02	13:45	Christine M Walts	2-14-02	13:45
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact			
Cool - Ice/Blue Ice			

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mex
Energy Minerals and Natural Resources

RECEIVED
JAN 15 2002
Environmental Bureau
Oil Conservation Division

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Revised M...

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒	4. Generator COASTAL CHEMICAL
Verbal Approval Received: Yes ☐ No ☒	5. Originating Site YARD TANKS
2. Management Facility Destination KEY DISPOSAL	6. Transporter Key
3. Address of Facility Operator #345 CR 3500 AZTEC NEW MEXICO	8. State NM
7. Location of Material (Street Address or ULSTR) 1130 MADISON LANE FARMINGTON, NM 87401	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

RINSEWATER FROM PUMPS, HOSES AND TANKS
ONLY VIRGIN CHEMICAL IN WASTE (UNUSED TREATING CHEMICALS)

LAST FILED 9-10-01 APPROVAL DATE 11-28-01

SEE MSDS SHEETS FILED 1-16-01

JAN 2002
RECEIVED
OIL CON. DIV
DIST. 3

Estimated Volume < 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: MOR DATE: 1-9-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: _____ TITLE: Enviro/Engr DATE: 01/09/02

APPROVED BY: _____ TITLE: Environmental Geologist DATE: 01/15/02

1-20511.0

1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S. Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Submit to OCD Permitted Surface Waste Management Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:

COATSAL CHEMICAL CO. LLC.
1130 MADISON LANE
FARMINGTON, NM. 87401

2. Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:

RINSE WATER FROM PUMP, HOSES, AND TANKS USED TO DELIVER CHEMICAL. ALL CHEMICALS RINSED OUT ARE VIRGIN UNUSED CHEMICALS. CHEMICALS MAY INCLUDE ALKANOLAMINE, GLYCOL (TEG & EG ANTIFREEZE.

4. Location of Waste (Street address &/or ULSTR):

COASTAL CHEmical co. LLC.
1130 MADISON LANE
FARMINGTON, NM. 87401

5. Destination (Surface Waste Management Facility):

Key Energy Disposal

6. Transporter:

Key Energy

7. Estimated Volume _____ cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

XX MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

XX **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: _____ Date: 1/9/02

Print Name: ROBERT BURNSIDE

Title: FACILITY MANAGER

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒	4. Generator Halliburton
Verbal Approval Received: Yes ☐ No ☒	5. Originating Site yard
2. Management Facility Destination Key Disposal	6. Transporter Key
3. Address of Facility Operator #345 CR 3500 Aztec NM	8. State NM
7. Location of Material (Street Address or ULSTR) 4109 E. Main Street Farmington NM 87402	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Retrieved frac fluids that are stored in yard

Analytical previously filed 7-21-01

Analytical Date: 10-26-01

I believe this is two tests.

Estimated Volume 200+ bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: MGR DATE: 1-4-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Michael Tolovich TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: _____ TITLE: Enviro/Engr DATE: 1/04/02

APPROVED BY: _____ TITLE: Environmental Geologist DATE: 1/7/02

District I - (505) 393-6161
625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD Permitted Surface Waste Management Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:
Halliburton Energy Services
4109 E. Main Street
Farmington, NM 87402

2. Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:
Return Frac Fluids that were stored in what is referred to as a junk water tank that was sampled on 10/26/01

4. Location of Waste (Street address &/or ULSTR):
Halliburton Energy Services
4109 E Main Street
Farmington

5. Destination (Surface Waste Management Facility):
Key Energy Services

6. Transporter:
Key Energy

7. Estimated Volume _____ cy/bbls

For NON-EXEMPT waste only, the following documentation is attached (check appropriate items):

_____ MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

X Other (Description) Knowledge of Process + Filed previously refer to analytical #3

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

_____ **EXEMPT** oilfield waste.

X **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: /Allen Rodrigue/ Date: 1-4-02

Print Name: ALLEN RODRIGUE

Title: SHARED SERVICES SUPERVISOR