

**1. Identification of the Substance/Preparation and Company**Product name: ***Ferrosilicon alloys***

Application of FeSi: Additive to steel, and to steel- and iron foundry products.

Address/Phone No: **Elkem ASA**  
**Silicon Division**  
Hoffsveien 65B  
P. O. Box 5211 Majorstua  
N-0303 OSLO, Norway  
Tlf: + 47 22 45 01 00  
Fax: + 47 22 45 04 95<http://www.silicon.elkem.no/>Contact person: Ole Svein Klevan ([ole-svein.klevan@elkem.no](mailto:ole-svein.klevan@elkem.no))

Emergency Phone No.: Not applicable

**2. Composition/Information on Ingredients**

Synonyms/Trade names: FeSi, (45, 65, 75, 90 or 92%) Si, Std. and Refined

CAS No.: 8049-17-0

HAZARDOUS INGREDIENT(S): None

Symbol: None

R and S Phrases: None

	Weight%
Constituents (analysis):	
Silicon (Si)	43 – 93
Aluminium (Al)	0.05 - 4
Calcium (Ca)	0.1 - 7.5
Manganese (Mn)	< 0.2
Titanium (Ti)	< 0.15
Copper (Cu)	< 0.1
Chromium (Cr)	< 0.1
Carbon (C)	< 0.05
Iron (Fe)	Rest

**3. Hazards Identification**

The product does not represent a hazard to health, safety or environment when handled and stored as advised. (See section 7).

Flammable and noxious gases may be formed in contact with moisture, acids or bases. (See section 10 and 11). FeSi-dust suspended in air may under certain conditions cause dust explosions. (See section 10).

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#### 4. First Aid Measures

Inhalation: Irritation caused by dust: Fresh air. See a physician on persistent feeling of discomfort.  
Phosphine/arsine intoxication: Seek medical attention. (See section 11).  
Skin contact: Wash skin with water and/or a mild detergent.  
Eye contact: Rinse eyes with water/saline solution. See a physician on persistent feeling of discomfort.  
Ingestion: Remove the person affected from dust-exposed area. See inhalation.

#### 5. Fire Fighting Measures

Extinguishing media: Dry sand, CO<sub>2</sub> or dry powder.

Dry FeSi in the form of lumps or granules is not combustible.

FeSi-dust suspended in air may under certain conditions cause dust explosions. (See section 10).

#### 6. Accidental Release Measures

Material in the form of dust should be collected in suitable containers. Damp product must be kept away from dry, and must not be collected and stored in closed containers. Dry dust can be vacuumed or swept up.

#### 7. Handling and Storage

Handling: Avoid handling that generates dust build-up. Avoid inhalation of dust. (See section 8). Avoid ignition sources (e.g. welding) in areas with high dust concentrations. Addition of wet material to molten metal may cause explosions. (See section 10).

Storage: FeSi must be kept in a dry and well-ventilated place, and away from acids and bases.

#### 8. Exposure Controls/Personal Protection

##### A. Occupational exposure controls

Eye protection, eye flushing facilities and protective gloves. Ensure good ventilation. Wear a particulate respirator according to EN 149 FFP 2S in areas of inadequate ventilation. If exposure to phosphine and arsine is suspected (see section 10) in areas of poor ventilation (e.g. storage holds, bunkers etc.), a self-contained breathing apparatus or an air fed respirator should be worn.

Occupational Exposure Limits (OEL): (see Health and Safety Executive document EH40/2002/2003):

	CAS Number	8 hr TWA		10 minute STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Total inhalable dust		-	10	-	-
Respirable dust		-	4	-	-
Phosphine gas (PH <sub>3</sub> )	7803-51-2	-	-	0.3	0.42
Arsine gas (AsH <sub>3</sub> )	7784-42-1	0.05	0.16	-	-

The low occupational exposure limit for arsine gas is due to the evidence for carcinogenicity in humans of inorganic arsenic compounds in general (IARC). Elkem has devised a procedure (1994) for sampling and measuring of the workplace atmosphere.

The OEL for dust does not cover possible arsine/phosphine absorption from dust deposited on mucous membranes.

##### B. Environmental exposure controls

See Sections 6, 7 and 12.

Limit values in ambient air (Council Directive 1999/30/EC)

	Averaging period	Limit value	Date by which limit value is to be met
PM <sub>10</sub> ★	24 hours	50 µg/m <sup>3</sup>	1 January 2005
PM <sub>10</sub>	Calendar year	40 µg/m <sup>3</sup>	1 January 2005

★ Not to be exceeded more than 35 times a calendar year.

## 9. Physical and Chemical Properties

Form : Lump material. Granulate. Sieve fractions. Cyclone dust.  
Colour : Silvery grey, metallic surface.  
Odour : Odourless.  
Solubility (Water) : Insoluble/ slightly soluble.

	Si (weight%):	45	50	65	75	90
Melting Point (°C)	Approx:	1290	1215	1280	1350	1400
Specific gravity (water = 1)	Approx:	4,4	4,2	3,6	3,2	2,7

## 10. Stability and Reactivity

### Conditions to avoid:

Avoid generating sparks and other ignition sources (e.g. welding) in areas with high dust concentrations. FeSi-particles suspended in air at concentrations above 100-300 g/m<sup>3</sup> can cause dust explosions. For a given particle size, the ignition sensitivity and the violence of explosion decrease with decreasing Si/Fe ratio. Dust with Si/Fe ratio  $\leq 2$  and particle diameter  $> 10 \mu\text{m}$ , is considered not to represent any danger of explosion.

Addition of wet material to molten metal may cause explosions.

### Materials to avoid:

Water/humidity, acids and bases.

### Hazardous decomposition products:

Highly flammable hydrogen gas (H<sub>2</sub>) and the highly flammable and very toxic gases phosphine and arsine (garlic-like smell), both heavier than air, may be formed if FeSi gets in contact with moisture, acids or bases. A reaction with hydrofluoric acid (HF) or nitric acid (HNO<sub>3</sub>) leads to the formation of toxic gases such as silicon tetrafluoride (SiF<sub>4</sub>) or nitrous gases (NO<sub>x</sub>).

Wet product will form highly flammable hydrogen gas if added to molten metal, due to decomposition of water.

## 11. Toxicological Information

### Acute effects:

Inhalation: Finely divided dust may irritate and dehydrate mucous membranes.  
Phosphine/arsine may be absorbed from dust deposited on mucous membranes.  
The toxic mechanism for phosphine is not clear. Phosphine irritates exposed mucous membranes, depresses the central nervous system (CNS) and can cause edema of the lungs. Acute, non-fatal poisoning with phosphine gives temporary effects, among others headache, malaise, vomiting, stomach pains, cough, and difficulty in breathing.

Skin contact: Dust may irritate the skin.

Eye contact: Dust may irritate and lead to dryness.

### Chronic effects:

No adverse chronic effects expected, based on both practical experience and review of available scientific literature. Historic, epidemiological studies covering cohorts of workers in the Norwegian ferro-alloy industry have been carried out.

## 12. Ecological Information

The product is not characterised as dangerous for the environment.

MOBILITY: The alloy has poor mobility under normal environmental conditions.  
PERSISTENCE: Not relevant for the elements in the alloy.  
BIOACCUMULATION: Not relevant, due to low mobility and non-dispersive use.  
ECO-TOXICITY: LC<sub>50</sub>/LD<sub>50</sub>: Not determined. Hardly relevant for inorganic, insoluble substances.

## 13. Disposal Considerations

The material should be recovered for recycling where possible.  
Disposal of materials must conform to the requirements of Section 34 of the Environmental Protection Act 1990.  
This material is not classed as "Special Waste" under the Control of Pollution (Special Waste) Regulations (2001).  
Prior to disposal of large quantities of this material, advice should be sought from the nearest Environment Agency.

## 14. Transport Information

UN no.	1408
IMO/BC-Code <sup>2), 3)</sup> :	(30-90)% Si, Class 4.3
BC-no.:	022
IMO/BC-Code <sup>2), 3)</sup> :	(25-30) and >90)% Si, Class MHB
IMDG-code <sup>1)</sup>	Not assigned to class 4.3
ICAO/IATA <sup>1)</sup>	Not assigned to class 4.3
ADR/RID <sup>1)</sup>	Not assigned to class 4.3

- 1) Consignments of ferrosilicon with a chemical analysis as described in section 2 has been tested according to "United Nations Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria Part III - 33.4.1.4" and has passed the test. Consequently, the product is not classified as a Class 4.3 product.
- 2) The shipment must be stored under cover, but in open air, in the particle size in which it is to be shipped, for no less than three days prior to shipment.  
IMO's "Code of Safe Practice for Solid Bulk Cargoes".

## 15. Regulatory Information

Product classification and labelling:

Symbol:	Not subject to classification.
R-phrases:	None.
S-phrases:	None.

The text of this Safety Data Sheet is prepared in compliance with:  
- Chemicals (Hazard Information and Packaging) Regulations 2002  
- Directives 2001/58/EC and 1999/45/EC

## 16. Other Information

Literature references are available upon application to the manufacturer.

## BRINE

Division of Facilities Services  
DOD Hazardous Material Information (ANSI Format)  
For Cornell University Convenience Only

## BRINE

Section 1 - Product and Company Identification Section 9 - Physical & Chemical Properties  
Section 2 - Composition/Information on Ingredients Section 10 - Stability & Reactivity Data  
Section 3 - Hazards Identification Including Emergency Overview Section 11 - Toxicological Information  
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Section 5 - Fire Fighting Measures Section 13 - Disposal Considerations  
Section 6 - Accidental Release Measures Section 14 - MSDS Transport Information  
Section 7 - Handling and Storage Section 15 - Regulatory Information  
Section 8 - Exposure Controls & Personal Protection Section 16 - Other Information

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Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.

Section 1 - Product and Company Identification  
BRINE

Product Identification: BRINE  
Date of MSDS: 01/01/1987 Technical Review Date: 06/10/1987

FSC: 6810 NIIN: LIIN: 00F005060

Submitter: F BT

Status Code: C

MFN: 01

Article: N

Kit Part: N

#### Manufacturer's Information

Manufacturer's Name: GREAT SALT LAKE MINERAL & CHEM/OGDEN, UT 84402

Manufacturer's Address1:

Manufacturer's Address2: N/P, NK 00000

Manufacturer's Country: NK

General Information Telephone:

Emergency Telephone: (801) 731-3100

Emergency Telephone: (801) 731-3100

MSDS Preparer's Name: N/P

Proprietary: N

Reviewed: Y

Published: Y

CAGE: 40167

Special Project Code: N

#### Contractor Information

Contractor's Name: GREAT SALT LAKE MINERAL & CHEMICAL CORP

Contractor's Address1: 765 N 10500 W

Contractor's Address2: OGDEN, UT 84404

Contractor's Telephone: 801-731-3100

Contractor's CAGE: 40167

#### Section 2 - Compositon/Information on Ingredients

BRINE

Ingredient Name: MAGNESIUM CHLORIDE (28-32%)

Ingredient CAS Number: 7786-30-3 Ingredient CAS Code: M

RTECS Number: OM2800000 RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: 32%  
% Enviromental Weight:  
Other REC Limits: N/P  
OSHA PEL: N/P OSHA PEL Code:  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: N/K ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical: N

### Section 3 - Hazards Identification, Including Emergency Overview BRINE

Health Hazards Acute & Chronic: N/P

Signs & Symptoms of Overexposure:  
N/K \_

Medical Conditions Aggravated by Exposure:  
N/P

LD50 LC50 Mixture: N/P

Route of Entry Indicators:  
Inhalation: N/P  
Skin: N/P  
Ingestion: N/P  
Carcenogenicity Indicators  
NTP: N/P  
IARC: N/P  
OSHA: N/P

Carcinogenicity Explanation: N/P

## Section 4 - First Aid Measures

BRINE

First Aid:

ORAL INGESTION OF LARGE DOSES WOULD CAUSE GI IRRITATION. FLUSH WITH WATER.

## Section 5 - Fire Fighting Measures

BRINE

Fire Fighting Procedures:

NONE

Unusual Fire or Explosion Hazard:

N/K

Extinguishing Media:

NOT FLAMMABLE

Flash Point: Flash Point Text: N/K

Autoignition Temperature:

Autoignition Temperature Text: N/A

Lower Limit(s): N/K

Upper Limit(s): N/K

## Section 6 - Accidental Release Measures

BRINE

Spill Release Procedures:

FLUSH WITH WATER

## Section 7 - Handling and Storage

BRINE

Handling and Storage Precautions:



## Other Precautions:

## Section 8 - Exposure Controls & Personal Protection

BRINE

### Respiratory Protection:

NONE

### Ventilation:

N/K

### Protective Gloves:

N/K

### Eye Protection: GLASSES

### Other Protective Equipment: N/K

### Work Hygienic Practices: N/P

### Supplemental Health & Safety Information: MSDS UDATED.

## Section 9 - Physical & Chemical Properties

BRINE

### HCC:

#### NRC/State License Number:

#### Net Property Weight for Ammo:

#### Boiling Point: Boiling Point Text: 212F

#### Melting/Freezing Point: Melting/Freezing Text: N/A

#### Decomposition Point: Decomposition Text: N/A

#### Vapor Pressure: N/K Vapor Density: N/K

#### Percent Volatile Organic Content:

#### Specific Gravity: 1.32

#### Volatile Organic Content Pounds per Gallon:

#### pH: N/P

#### Volatile Organic Content Grams per Liter:

#### Viscosity: N/P

#### Evaporation Weight and Reference: (WATER =1): 1

#### Solubility in Water: SOLUBLE

#### Appearance and Odor: N/K

Percent Volatiles by Volume: 100%

Corrosion Rate: N/P

## Section 10 - Stability & Reactivity Data

BRINE

Stability Indicator: YES

Materials to Avoid:

NONE

Stability Condition to Avoid:

N/K

Hazardous Decomposition Products:

CHLORINE

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

N/K

## Section 11 - Toxicological Information

BRINE

Toxicological Information:

N/P

## Section 12 - Ecological Information

BRINE

Ecological Information:

N/P

## Section 13 - Disposal Considerations

BRINE

**Waste Disposal Methods:**

**SOLUBLE IN WATER - NEUTRAL OR SLIGHTLY BASIC SOLUTION OCCURS.**

**Section 14 - MSDS Transport Information**

**BRINE**

**Transport Information:**

**N/P**

**Section 15 - Regulatory Information**

**BRINE**

**SARA Title III Information:**

**N/P**

**Federal Regulatory Information:**

**N/P**

**State Regulatory Information:**

**N/P**

**Section 16 - Other Information**

**BRINE**

**Other Information:**

**N/P**

**HAZCOM Label Information**

**Product Identification: BRINE**

**CAGE: 40167**

**Assigned Individual: N**

**Company Name: GREAT SALT LAKE MINERAL & CHEMICAL CORP**

**Company PO Box:**

**Company Street Address1: 765 N 10500 W**

**Company Street Address2: OGDEN, UT 84404 US**

Health Emergency Telephone: (801) 731-3100

Label Required Indicator: Y

Date Label Reviewed: 12/16/1998

Status Code: C

Manufacturer's Label Number:

Date of Label: 12/16/1998

Year Procured: N/K

Organization Code: G

Chronic Hazard Indicator: N/P

Eye Protection Indicator: N/P

Skin Protection Indicator: N/P

Respiratory Protection Indicator: N/P

Signal Word: N/P

Health Hazard:

Contact Hazard:

Fire Hazard:

Reactivity Hazard:

8/8/2002 7:53:35 AM

## #1 DIESEL LOW SULPHUR

Division of Facilities Services  
DOD Hazardous Material Information (ANSI Format)  
For Cornell University Convenience Only

## #1 DIESEL LOW SULPHUR

Section 1 - Product and Company Identification Section 9 - Physical &  
Chemical Properties  
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Information

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## Section 1 - Product and Company Identification #1 DIESEL LOW SULPHUR

Product Identification: #1 DIESEL LOW SULPHUR  
Date of MSDS: 10/01/1993 Technical Review Date: 10/12/1994  
FSC: 9140 NIIN: 00-000-0185  
Submitter: D DG  
Status Code: C  
MFN: 01

Article: N  
Kit Part: N

#### Manufacturer's Information

Manufacturer's Name: BELL FUELS INC  
Manufacturer's Address1: 4116 W PETERSON AVE  
Manufacturer's Address2: CHICAGO, IL 60646-6017  
Manufacturer's Country: US  
General Information Telephone: 312-286-0200  
Emergency Telephone: 312-286-0200  
Emergency Telephone: 312-286-0200  
MSDS Preparer's Name: UNKNOWN  
Proprietary: N  
Reviewed: Y  
Published: Y  
CAGE: 8P539  
Special Project Code: N

#### Item Description

Item Name: USED TO BE 26648  
Item Manager:  
Specification Number: NK  
Type/Grade/Class: NK  
Unit of Issue: GL  
Unit of Issue Quantity: X  
Type of Container:

#### Contractor Information

Contractor's Name: BELL FUELS INC  
Contractor's Address1: 4116 W PETERSON AVE  
Contractor's Address2: CHICAGO, IL 60646-6017  
Contractor's Telephone: 312-286-0200  
Contractor's CAGE: 8P539

#### Section 2 - Compositon/Information on Ingredients #1 DIESEL LOW SULPHUR

Ingredient Name: AROMATIC HYDROCARBONS  
Ingredient CAS Number: Ingredient CAS Code: X  
RTECS Number: RTECS Code: X  
=WT: =WT Code:  
=Volume: =Volume Code:  
>WT: >WT Code:  
>Volume: >Volume Code:  
<WT: <WT Code:

<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: 17-25  
% Enviromental Weight:  
Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical:

Ingredient Name: SATURATED HYDROCARBONS (PARAFFINS & CYCLOPARAFFINS)

Ingredient CAS Number: Ingredient CAS Code: X

RTECS Number: RTECS Code: X

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 70-80

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

Ingredient Name: UNSATURATED HYDROCARBONS (OLEFINS)

Ingredient CAS Number: Ingredient CAS Code: X

RTECS Number: RTECS Code: X

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 3-6

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

### Section 3 - Hazards Identification, Including Emergency Overview

#### #1 DIESEL LOW SULPHUR

Health Hazards Acute & Chronic: NONE SPECIFIED BY MANUFACTURER.

Signs & Symptoms of Overexposure:

EYE: CAUSE LITTLE OR NO INJURY ON DIRECT CONTACT. SKIN: MAY CAUSE IRRITATION ON PROLONGED AND REPEATED CONTACT. SYSTEMIC: INHALATION OF HIGH CONCENTRATIONS OF VAPOR MAY RESULT IN BRONCHITIS, PNEUMONIA , BLOOD CHANGES, POLYNEURITIES, RESPIRATORY DISTURBANCES, DERMATITIS.

Medical Conditions Aggravated by Exposure:

NONE SPECIFIED BY MANUFACTURER.

LD50 LC50 Mixture: ORAL LD50 (RAT) IS UNKNOWN

Route of Entry Indicators:

Inhalation: YES

Skin: YES

Ingestion: YES

Carcenogenicity Indicators

NTP: N/P

IARC: N/P

OSHA: N/P

Carcinogenicity Explanation: N/P



## Section 4 - First Aid Measures

### #1 DIESEL LOW SULPHUR

#### First Aid:

EYE: RINSE EYES THOROUGHLY WITH WATER. SKIN: WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER. INHALATION: REMOVE FROM CONTAMINATED AREA. CALL A PHYSICIAN. INGESTION: GIVE VEGETABLE OIL OR A CHARCOAL SLURRY. DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

## Section 5 - Fire Fighting Measures

### #1 DIESEL LOW SULPHUR

#### Fire Fighting Procedures:

AVOID USE OF SOLID WATER STREAMS. AVOID EXCESSIVE WATER SPRAY APPLICATION. WATER CAN BE USED TO COOL EXPOSED SURFACES.

#### Unusual Fire or Explosion Hazard:

COMBUSTIBLE LIQUID

#### Extinguishing Media:

ANY U.L. APPROVED CLASS B MEDIA, FOAM, CARBON DIOXIDE OR DRY CHEMICAL.

Flash Point: Flash Point Text: 120F,49C

#### Autoignition Temperature:

Autoignition Temperature Text: N/A

Lower Limit(s): 0.7

Upper Limit(s): 5.0

## Section 6 - Accidental Release Measures

### #1 DIESEL LOW SULPHUR

#### Spill Release Procedures:

SMALL SPILLS: ABSORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD. LARGE SPILL: ELIMINATE ALL IGNITION SOURCES. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREAD, PUMP LIQUID TO SALVAGE.

## Section 7 - Handling and Storage

### #1 DIESEL LOW SULPHUR

## Handling and Storage Precautions:

## Other Precautions:

## Section 8 - Exposure Controls & Personal Protection

### #1 DIESEL LOW SULPHUR

#### Respiratory Protection:

APPROVED ORGANIC VAPOR CHEMICAL CARTRIDGE OR SUPPLIED AIR RESPIRATORS.

#### Ventilation:

LOCAL EXHAUST REQUIRED. SPECIAL VENTILATION: EXPLOSION PROOF EQUIPMENT. MECHANICAL VENTILATION SHOULD BE EXPLOSION-PROOF

#### Protective Gloves:

IMPERMEABLE

#### Eye Protection: NONE SPECIFIED BY MANUFACTURER.

Other Protective Equipment: RESPIRATORY PROTECTION FOR MISTS AND HIGH VAPOR. CHEMICAL CARTRIDGE RESPIRATOR OR AIR SUPPLIED EQUIPMENT

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, DRINKING OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Health & Safety Information: NONE

## Section 9 - Physical & Chemical Properties

### #1 DIESEL LOW SULPHUR

HCC: F4

NRC/State License Number: N/R

Net Property Weight for Ammo: N/R

Boiling Point: Boiling Point Text: 325F,163C

Melting/Freezing Point: Melting/Freezing Text: UNKNOWN

Decomposition Point: Decomposition Text: UNKNOWN

Vapor Pressure: 1-10 @100F Vapor Density: 4-5 (AIR=1

Percent Volatile Organic Content:

Specific Gravity: 0.8 (WATER=1)

Volatile Organic Content Pounds per Gallon:

pH: N/R

Volatile Organic Content Grams per Liter:

Viscosity: N/P

Evaporation Weight and Reference: UNKNOWN

Solubility in Water: NEGLIGIBLE

Appearance and Odor: WATER WHITE TO STRAW TINT LIQUID; AROMATIC ODOR.

Percent Volatiles by Volume: N/R

Corrosion Rate: UNKNOWN

## Section 10 - Stability & Reactivity Data

#1 DIESEL LOW SULPHUR

Stability Indicator: YES

Materials to Avoid:

OXIDIZERS

Stability Condition to Avoid:

NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:

NONE SPECIFIED BY MANUFACTURER.

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

NOT RELEVANT

## Section 11 - Toxicological Information

#1 DIESEL LOW SULPHUR

Toxicological Information:

N/P

## Section 12 - Ecological Information

#1 DIESEL LOW SULPHUR

Ecological Information:

N/P

## Section 13 - Disposal Considerations

#1 DIESEL LOW SULPHUR

Waste Disposal Methods:

ALLOW VOLITILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD. DISPOSE OF IN ACCORDANCE WITH APPLICIABLE REGULATIONS.

LARGE SPILLS: DESTROY BY LIQUID INCINERATION IN ACCORDANCE WITH APPLICABLE REGULATIONS.

Section 14 - MSDS Transport Information

#1 DIESEL LOW SULPHUR

Transport Information:

N/P

Section 15 - Regulatory Information

#1 DIESEL LOW SULPHUR

SARA Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Section 16 - Other Information

#1 DIESEL LOW SULPHUR

Other Information:

N/P

HMIS Transportation Information

Product Identification: #1 DIESEL LOW SULPHUR

Transportation ID Number: 43140

Responsible Party CAGE: 8P539

Date MSDS Prepared: 10/01/1993

Date MSDS Reviewed: 10/12/1994

MFN: 10/12/1994

Submitter: D DG

Status Code: C

Container Information

Unit of Issue: GL

Container Quantity: X

Type of Container:

Net Unit Weight:  
Article without MSDS: N  
Technical Entry NOS Shipping Number: SATURATED HYDROCARBONS (PARAFFINS & CYCLOPARAFFINS); AROMATIC HYDROCARBONS.  
Radioactivity:  
Form:  
Net Explosive Weight:  
Coast Guard Ammunition Code:  
Magnetism: N/P  
AF MMAC Code:  
DOD Exemption Number:  
Limited Quantity Indicator:  
Multiple Kit Number: 0  
Kit Indicator: N  
Kit Part Indicator: N  
Review Indicator: Y  
Additional Data:

Department of Transportation Information  
DOT Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S.  
DOT PSN Code: GJL  
Symbols: G  
DOT PSN Modifier:  
Hazard Class: 3  
UN ID Number: UN1993  
DOT Packaging Group: III  
Label: FLAMMABLE LIQUID  
Special Provision(s): B1,B52,T7,T30  
Packaging Exception: 150  
Non Bulk Packaging: 203  
Bulk Packaging: 242  
Maximum Quantity in Passenger Area: 60 L  
Maximum Quantity in Cargo Area: 220 L  
Stow in Vessel Requirements: A  
Requirements Water/Sp/Other:

IMO Detail Information  
IMO Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. o  
IMO PSN Code: HIA  
IMO PSN Modifier:  
IMDG Page Number: 3345  
UN Number: 1993  
UN Hazard Class: 3.3  
IMO Packaging Group: III  
Subsidiary Risk Label: -

EMS Number: 3-07

Medical First Aid Guide Number: T

#### IATA Detail Information

IATA Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. \*

IATA PSN Code: MCA

IATA PSN Modifier:

IATA UN Id Number: 1993

IATA UN Class: 3

Subsidiary Risk Class:

UN Packaging Group: III

IATA Label: FLAMMABLE LIQUID

Packaging Note for Passengers: 309

Maximum Quantity for Passengers: 60L

Packaging Note for Cargo: 310

Maximum Quantity for Cargo: 220L

Exceptions:

#### AFI Detail Information

AFI Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S.

AFI Symbols: \*

AFI PSN Code: MCA

AFI PSN Modifier:

AFI UN Id Number: UN1993

AFI Hazard Class: 3

AFI Packing Group: III

AFI Label:

Special Provisions: P5

Back Pack Reference: A7.3

#### HAZCOM Label Information

Product Identification: #1 DIESEL LOW SULPHUR

CAGE: 8P539

Assigned Individual: N

Company Name: BELL FUELS INC

Company PO Box:

Company Street Address1: 4116 W PETERSON AVE

Company Street Address2: CHICAGO, IL 60646-6017 US

Health Emergency Telephone: 312-286-0200

Label Required Indicator: Y

Date Label Reviewed: 10/12/1994

Status Code: C

Manufacturer's Label Number: NONE

Date of Label: 10/12/1994

Year Procured: N/K

Organization Code: F

Chronic Hazard Indicator: N/P

Eye Protection Indicator: YES

Skin Protection Indicator: YES

Respiratory Protection Indicator: YES

Signal Word: WARNING

Health Hazard: Moderate

Contact Hazard: Slight

Fire Hazard: Slight

Reactivity Hazard: None

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## DTE 25 HYDRAULIC OIL

Division of Facilities Services  
DOD Hazardous Material Information (ANSI Format)  
For Cornell University Convenience Only

## DTE 25 HYDRAULIC OIL

Section 1 - Product and Company Identification Section 9 - Physical &  
Chemical Properties  
Section 2 - Compositon/Information on Ingredients Section 10 - Stability &  
Reactivity Data  
Section 3 - Hazards Identification Including Emergency Overview Section 11  
- Toxicological Information  
Section 4 - First Aid Measures Section 12 - Ecological Information  
Section 5 - Fire Fighting Measures Section 13 - Disposal Considerations  
Section 6 - Accidental Release Measures Section 14 - MSDS Transport  
Information  
Section 7 - Handling and Storage Section 15 - Regulatory Information  
Section 8 - Exposure Controls & Personal Protection Section 16 - Other  
Information

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Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.

## Section 1 - Product and Company Identification DTE 25 HYDRAULIC OIL

Product Identification: DTE 25 HYDRAULIC OIL  
Date of MSDS: 12/27/1993 Technical Review Date: 03/20/1996  
FSC: 9150 NIIN: 00-993-6621  
Submitter: D DG  
Status Code: C  
MFN: 02  
Article: N



Kit Part: N

#### Manufacturer's Information

Manufacturer's Name: MOBIL OIL CORPORATION

Post Office Box: 3311

Manufacturer's Address1: BEAUMOUNT REFINERY INTERSTATE 10

Manufacturer's Address2: BEAUMONT, TX 77704

Manufacturer's Country: US

General Information Telephone: 800-662-4525

Emergency Telephone: 609-737-4411/800-424-9300(CHEMTREC)

Emergency Telephone: 609-737-4411/800-424-9300(CHEMTREC)

MSDS Preparer's Name: UNKNOWN

Proprietary: N

Reviewed: Y

Published: Y

CAGE: 19135

Special Project Code: N

#### Item Description

Item Name: LUBRICATING OIL,GENERAL PURPOSE

Item Manager: S9G

Specification Number: N/R

Type/Grade/Class: N/R

Unit of Issue: DR Quantitative Expression: 00000000055GL

Unit of Issue Quantity: 0

Type of Container: STEEL 18/18

#### Contractor Information

Contractor's Name: MOBIL OIL CORPORATION

Post Office Box: 3311

Contractor's Address1: BEAUMOUNT REFINERY INTERSTATE 10

Contractor's Address2: BEAUMONT, TX 77704

Contractor's Telephone: 609-737-4411/800-424-9300(CHEMTREC)

Contractor's CAGE: 19135

#### Section 2 - Compositon/Information on Ingredients

DTE 25 HYDRAULIC OIL

Ingredient Name: MINERAL OIL, PETROLEUM DISTILLATE, SOLVENT DEWAXED (MILD), HEAVY PARAFFINIC

Ingredient CAS Number: 64742-65-0 Ingredient CAS Code: M

RTECS Number: PY8038500 RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:  
<WT: <WT Code:  
<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: >95  
% Enviromental Weight:  
Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical: N

Ingredient Name: MINERAL OIL,HYDROTREATED (SEVERE), PETROLEUM DISTILLATE, HEAVY PARAFFINIC

Ingredient CAS Number: 64742-54-7 Ingredient CAS Code: M

RTECS Number: PY8035501 RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: >95

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical: N

Ingredient Name: PHOSPHORODITHIOIC ACID,MIXED O,O-BIS(ISO-BU AND ISOCTYL AND PENTYL)ESTERS,ZINSALTS

Ingredient CAS Number: 68988-46-5 Ingredient CAS Code: M

RTECS Number: RTECS Code: X

=WT: =WT Code:

=Volume: =Volume Code:  
>WT: >WT Code:  
>Volume: >Volume Code:  
<WT: <WT Code:  
<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: 0.63  
% Enviromental Weight:  
Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical: N

Ingredient Name: PHOSPHORODITHOIC ACID, O-O-D1 C1-14-ALKYL ESTERS, ZINC SALTS  
(2:1) (ZDDP)

Ingredient CAS Number: 68649-42-3 Ingredient CAS Code: M  
RTECS Number: RTECS Code: X  
=WT: =WT Code:

=Volume: =Volume Code:  
>WT: >WT Code:  
>Volume: >Volume Code:  
<WT: <WT Code:  
<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: 0.67  
% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical: N

Ingredient Name: PRODUCT CONTAINS ONE OR BOTH INGREDIENTS 1 & 2 FOR A TOTAL OF  
>95%

Ingredient CAS Number: Ingredient CAS Code: X

RTECS Number: 9999999ZZ RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: N/P

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

Ingredient Name: VOLATILE ORGANIC CONTENT: 0.215 LB/GAL

Ingredient CAS Number: Ingredient CAS Code: X

RTECS Number: 9999999VO RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: <3

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

Ingredient Name: ZINC (SARA 313) (CERCLA)

Ingredient CAS Number: 7440-66-6 Ingredient CAS Code: M

RTECS Number: ZG8600000 RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 0.1

% Enviromental Weight:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: NOT ESTABLISHED OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT ESTABLISHED ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity: 1000 LBS

DOT Reporting Quantity: 1000 LBS

Ozone Depleting Chemical: N

### Section 3 - Hazards Identification, Including Emergency Overview

DTE 25 HYDRAULIC OIL

Health Hazards Acute & Chronic: ACUTE: NO SIGNIFIGANT EFFECTS ARE EXPECTED.

CHRONIC: NO ADVERSE EFFECTS ARE EXPECTED. NOTE: HIGH PRESSURE INJECTION UNDER THE SKIN MAY CAUSE NECROSIS OF SKIN AND UNDERLYING TISSUE DAMAAE.

Signs & Symptoms of Overexposure:

N/P

Medical Conditions Aggravated by Exposure:

N/P

LD50 LC50 Mixture: ORAL LD50 (RAT) IS >2000 MG/KG

Route of Entry Indicators:

Inhalation: NO

Skin: NO

Ingestion: NO

Carcenogenicity Indicators

NTP: NO

IARC: NO

OSHA: NO

Carcinogenicity Explanation: NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGE

#### Section 4 - First Aid Measures DTE 25 HYDRAULIC OIL

First Aid:  
N/P

#### Section 5 - Fire Fighting Measures DTE 25 HYDRAULIC OIL

Fire Fighting Procedures:

USE WATER TO COOL FIRE EXPOSED CONTAINERS OR FLUSH SPILLS AWAY FROM EXPOSURE. PREVENT RUNOFF FROM FIREFIGHTING OR DILUTION FROM ENTERING SEWERS OR WATERWAYS.

Unusual Fire or Explosion Hazard:

FOR FIRES IN ENCLOSED AREAS, FIRE FIGHTERS MUST WEAR SELF-CONTAINED BREATHING APPARATUS.

Extinguishing Media:

CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG. WATER OR FOAM MAY CAUSE FROTHING.

Flash Point: Flash Point Text: >395F,>202C

Autoignition Temperature:

Autoignition Temperature Text: N/K

Lower Limit(s): 0.6%

Upper Limit(s): 7.0%

#### Section 6 - Accidental Release Measures DTE 25 HYDRAULIC OIL

Spill Release Procedures:  
N/P

#### Section 7 - Handling and Storage DTE 25 HYDRAULIC OIL

## Handling and Storage Precautions:

Other Precautions:

## Section 8 - Exposure Controls & Personal Protection DTE 25 HYDRAULIC OIL

Respiratory Protection:

N/P

Ventilation:

N/P

Protective Gloves:

N/P

Eye Protection: N/P

Other Protective Equipment: N/P

Work Hygienic Practices: N/P

Supplemental Health & Safety Information: N/P

## Section 9 - Physical & Chemical Properties DTE 25 HYDRAULIC OIL

HCC: V6

NRC/State License Number: N/K

Net Property Weight for Ammo: N/K

Boiling Point: Boiling Point Text: >600F,>316C

Melting/Freezing Point: Melting/Freezing Text: -11F,-24C

Decomposition Point: Decomposition Text: UNKNOWN

Vapor Pressure: <0.1 Vapor Density: UNKNOWN

Percent Volatile Organic Content:

Specific Gravity: 0.885

Volatile Organic Content Pounds per Gallon:

pH: N/R

Volatile Organic Content Grams per Liter:

Viscosity: >42.8CS@40C

Evaporation Weight and Reference: UNKNOWN

Solubility in Water: NEGLIGIBLE

Appearance and Odor: DARK AMBER LIQUID WITH MILD ODOR.

Percent Volatiles by Volume: <3

Corrosion Rate: UNKNOWN

## Section 10 - Stability & Reactivity Data DTE 25 HYDRAULIC OIL

Stability Indicator: YES

Materials to Avoid:

STRONG OXIDIZING AGENTS.

Stability Condition to Avoid:

EXTREME HEAT

Hazardous Decomposition Products:

CARBON MONOXIDE, METAL OXIDES. ELEMENTAL OXIDES.

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

NONE SPECIFIED BY MANUFACTURER.

## Section 11 - Toxicological Information DTE 25 HYDRAULIC OIL

Toxicological Information:

N/P

## Section 12 - Ecological Information DTE 25 HYDRAULIC OIL

Ecological Information:

N/P

## Section 13 - Disposal Considerations DTE 25 HYDRAULIC OIL

Waste Disposal Methods:

N/P

## Section 14 - MSDS Transport Information DTE 25 HYDRAULIC OIL



Transport Information:

N/P

Section 15 - Regulatory Information

DTE 25 HYDRAULIC OIL

SARA Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Section 16 - Other Information

DTE 25 HYDRAULIC OIL

Other Information:

N/P

HMIS Transportation Information

Product Identification: DTE 25 HYDRAULIC OIL

Transportation ID Number: 97147

Responsible Party CAGE: 19135

Date MSDS Prepared: 12/27/1993

Date MSDS Reviewed: 03/20/1996

MFN: 03/20/1996

Submitter: D DG

Status Code: C

Container Information

Unit of Issue: DR

Container Quantity: 0

Type of Container: STEEL 18/18

Net Unit Weight: 405.3 LBS

Article without MSDS: N

Technical Entry NOS Shipping Number:

Radioactivity: N/R

Form:

Net Explosive Weight: N/R

Coast Guard Ammunition Code: N/R

Magnetism: N/P

AF MMAC Code:

DOD Exemption Number: N/R

Limited Quantity Indicator:

Multiple Kit Number: 0

Kit Indicator: N

Kit Part Indicator: N

Review Indicator: Y

Additional Data:

NOT REGULATED FOR SHIPPING BY DOT/IMO/IATA PER MFR MSDS.

#### Department of Transportation Information

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

DOT PSN Code: ZZZ

Symbols: N/R

DOT PSN Modifier:

Hazard Class: N/R

UN ID Number: N/R

DOT Packaging Group: N/R

Label: N/R

Special Provision(s): N/R

Packaging Exception: N/R

Non Bulk Packaging: N/R

Bulk Packaging: N/R

Maximum Quantity in Passenger Area: N/R

Maximum Quantity in Cargo Area: N/R

Stow in Vessel Requirements: N/R

Requirements Water/Sp/Other: N/R

#### IMO Detail Information

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

IMO PSN Code: ZZZ

IMO PSN Modifier:

IMDG Page Number: N/R

UN Number: N/R

UN Hazard Class: N/R

IMO Packaging Group: N/R

Subsidiary Risk Label: N/R

EMS Number: N/R

Medical First Aid Guide Number: N/R

#### IATA Detail Information

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IATA PSN Code: ZZZ

IATA PSN Modifier:

IATA UN Id Number: N/R

IATA UN Class: N/R

Subsidiary Risk Class: N/R  
UN Packaging Group: N/R  
IATA Label: N/R  
Packaging Note for Passengers: N/R  
Maximum Quantity for Passengers: N/R  
Packaging Note for Cargo: N/R  
Maximum Quantity for Cargo: N/R  
Exceptions: N/R

#### AFI Detail Information

AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
AFI Symbols:  
AFI PSN Code: ZZZ  
AFI PSN Modifier:  
AFI UN Id Number: N/R  
AFI Hazard Class: N/R  
AFI Packing Group: N/R  
AFI Label: N/R  
Special Provisions: N/A  
Back Pack Reference: N/A

#### HAZCOM Label Information

Product Identification: DTE 25 HYDRAULIC OIL  
CAGE: 19135  
Assigned Individual: N  
Company Name: MOBIL OIL CORPORATION  
Company PO Box: 3311  
Company Street Address1: BEAUMOUNT REFINERY INTERSTATE 10  
Company Street Address2: BEAUMONT, TX 77704 US  
Health Emergency Telephone: 609-737-4411/800-424-9300(CHEMTREC)  
Label Required Indicator: Y  
Date Label Reviewed: 03/20/1996  
Status Code: C  
Manufacturer's Label Number: N/R  
Date of Label: 03/20/1996  
Year Procured: N/K  
Organization Code: F  
Chronic Hazard Indicator: N  
Eye Protection Indicator: N/P  
Skin Protection Indicator: N/P  
Respiratory Protection Indicator: N/P  
Signal Word: CAUTION  
Health Hazard: None  
Contact Hazard: None  
Fire Hazard: Slight  
Reactivity Hazard: None

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## HAVOLINE MOTOR OIL SAE 30, 01830

Division of Facilities Services  
DOD Hazardous Material Information (ANSI Format)  
For Cornell University Convenience Only

## HAVOLINE MOTOR OIL SAE 30, 01830

Section 1 - Product and Company Identification Section 9 - Physical & Chemical Properties  
Section 2 - Composition/Information on Ingredients Section 10 - Stability & Reactivity Data  
Section 3 - Hazards Identification Including Emergency Overview Section 11 - Toxicological Information  
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## Section 1 - Product and Company Identification HAVOLINE MOTOR OIL SAE 30, 01830

Product Identification: HAVOLINE MOTOR OIL SAE 30, 01830

Date of MSDS: 02/21/1990 Technical Review Date: 09/25/1991

FSC: 9150 NIIN: 00-903-6266

Submitter: N EN

Status Code: C

MFN: 01

Article: N

Kit Part: N

#### Manufacturer's Information

Manufacturer's Name: TEXACO, INC

Post Office Box: 509

Manufacturer's Address1:

Manufacturer's Address2: BEACON, NY 12508-0509

Manufacturer's Country: US

General Information Telephone: 914-831-3400; EXT 204

Emergency Telephone: 914-831-3400; EXT 204

Emergency Telephone: 914-831-3400; EXT 204

MSDS Preparer's Name: MJ VON ALLMEN

Proprietary: N

Reviewed: N

Published: Y

CAGE: FO311

Special Project Code: N

#### Item Description

Item Name:

Item Manager:

Specification Number: NK

Type/Grade/Class: NK

Unit of Issue:

Unit of Issue Quantity:

Type of Container:

#### Contractor Information

Contractor's Name: TEXACO INC

Post Office Box: 509

Contractor's Address1: UNKNOWN

Contractor's Address2: BEACON, NY 12508-0509

Contractor's Telephone: 914-831-3400

Contractor's CAGE: 7B131

#### Contractor Information

Contractor's Name: TEXACO, INC

Post Office Box: 509

Contractor's Address1: N/K

Contractor's Address2: BEACON, NY 12508

Contractor's Telephone: (914) 831-3400

Contractor's CAGE: FO311

#### Section 2 - Compositon/Information on Ingredients

HAVOLINE MOTOR OIL SAE 30, 01830

Ingredient Name: ALKENYLSUCCINIMIDE DISPERSANT (MFR CAS: TSBA CBI)

Ingredient CAS Number: Ingredient CAS Code: X

RTECS Number: RTECS Code: X

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 4-11

% Enviromental Weight:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT APPLICABLE ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

Ingredient Name: DIALKYLDITHIOPHOSPHORIC ACID, ZINC SALT

Ingredient CAS Number: 68649-42-3 Ingredient CAS Code: M

RTECS Number: RTECS Code: X

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 1-4

% Enviromental Weight:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: NOT APPLICABLE ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical: N

Ingredient Name: MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEM WAXED HEAVY PARAFFINIC

Ingredient CAS Number: 64742-65-0 Ingredient CAS Code: M

RTECS Number: PY8038500 RTECS Code: M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: 80-95

% Environmental Weight:

Other REC Limits: N/K

OSHA PEL: 5 MG/M3 MIST (MFR) OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: 5 MG/M3 MIST (MFR) ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical: N

### Section 3 - Hazards Identification, Including Emergency Overview

HAVOLINE MOTOR OIL SAE 30, 01830

Health Hazards Acute & Chronic: BELIEVED TO BE MINIMALLY IRRITATING TO EYES/SKIN. INHAL: VAP OR MIST IN EXCESS OF RECOMMENDED EXOSURE LIMITS MAY CAUSE IRRITAT, HDCH, NAUS, DROW. USED GASOLINE MOTOR OILS HAVE CAUSED SKIN CANCER IN LA B ANIMALS WHEN REPEATEDLY APPLIED & LEFT IN PLACE BETWEEN APPLICATIONS. AVOID SKIN CONTACT W/USED MOTOR OILS.

Signs & Symptoms of Overexposure:

SEE HEALTH HAZARDS.

Medical Conditions Aggravated by Exposure:

NONE SPECIFIED BY MANUFACTURER.

LD50 LC50 Mixture: LD50 (ORL-RAT) >5 G/KG

Route of Entry Indicators:



Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Indicators

NTP: NO

IARC: YES

OSHA: NO

Carcinogenicity Explanation: INGREDIENT WITH CAS NO. 64742-65-0 IS LISTED BY THE RTECS AS AN IARC GROUP1 CARCINOGEN.

#### Section 4 - First Aid Measures

HAVOLINE MOTOR OIL SAE 30, 01830

##### First Aid:

EYES: AS WITH MOST FOREIGN MATERIALS, SHOULD EYE CONTACT OCCUR, FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SKIN: WASH EXPOSED AREAS WITH SOAP AND WATER. INHALATION: IF IRRITATION OR DROWSINESS OCCURS, REMOVE TO FRESH AIR. INGEST: NONE NECESSARY.

#### Section 5 - Fire Fighting Measures

HAVOLINE MOTOR OIL SAE 30, 01830

##### Fire Fighting Procedures:

WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT. USE WATER TO COOL FIRE-EXPOSED CONTAINERS. IF LEAK/SPILL HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE VAPOR/PROTECT PERSONS.

##### Unusual Fire or Explosion Hazard:

HEAT/COMBUSTION PRODUCES CO, CO<sub>2</sub>, ALDEHYDES, KETONES, COMBUSTION PRODUCTS OF SULFUR, ZINC, COPPER, PHOSPHORUS.

##### Extinguishing Media:

WATER SPRAY, DRY CHEMICAL, FOAM, OR CARBON DIOXIDE. WATER OR FOAM MAY CAUSE FROTHING.

Flash Point: Flash Point Text: 430F,221C

##### Autoignition Temperature:

Autoignition Temperature Text: N/A

Lower Limit(s): N/K

Upper Limit(s): N/K

#### Section 6 - Accidental Release Measures

HAVOLINE MOTOR OIL SAE 30, 01830

## Spill Release Procedures:

CONTAIN SPILL IF POSSIBLE, WIPE UP OR ABSORB ON SUITABLE MATERIAL AND SHOVEL UP.

## Section 7 - Handling and Storage

HAVOLINE MOTOR OIL SAE 30, 01830

### Handling and Storage Precautions:

### Other Precautions:

## Section 8 - Exposure Controls & Personal Protection

HAVOLINE MOTOR OIL SAE 30, 01830

### Respiratory Protection:

NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N)

### Ventilation:

ADEQUATE TO MEET COMPONENT PERMISSIBLE CONCENTRATIONS.

### Protective Gloves:

IMPERVIOUS GLOVES(FP N).

Eye Protection: CHEMICAL WORKERS GOGGLES(FP N).

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices: CLEANSE EXPOSED SKIN AREAS SEVERAL TIMES DAILY W/SOAP & WATER, CLEANSE SOILED CLOTHING AT LEAST WEEKLY.

Supplemental Health & Safety Information: NONE SPECIFIED BY MANUFACTURER.

## Section 9 - Physical & Chemical Properties

HAVOLINE MOTOR OIL SAE 30, 01830

### HCC:

NRC/State License Number:

Net Property Weight for Ammo:

Boiling Point: Boiling Point Text: N/K

Melting/Freezing Point: Melting/Freezing Text: N/K

Decomposition Point: Decomposition Text: N/K

Vapor Pressure: N/K Vapor Density: N/K

Percent Volatile Organic Content:

Specific Gravity: 0.8877

Volatile Organic Content Pounds per Gallon:

pH: N/A

Volatile Organic Content Grams per Liter:

Viscosity: N/P

Evaporation Weight and Reference: N/K

Solubility in Water: N/K

Appearance and Odor: BRIGHT AND CLEAR LIQUID, MILD ADDITIVE ODOR.

Percent Volatiles by Volume: N/K

Corrosion Rate: N/K

## Section 10 - Stability & Reactivity Data

HAVOLINE MOTOR OIL SAE 30, 01830

Stability Indicator: N/P

Materials to Avoid:

STRONG OXIDIZERS.

Stability Condition to Avoid:

NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:

CARBON MONOXIDE, CARBON DIOXIDE, ALDEHYDES AND KETONES, COMBUSTION PRODUCTS OF SULFUR, ZINC, COPPER, AND PHOSPHOROUS.

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

NOT RELEVANT.

## Section 11 - Toxicological Information

HAVOLINE MOTOR OIL SAE 30, 01830

Toxicological Information:

N/P

## Section 12 - Ecological Information

HAVOLINE MOTOR OIL SAE 30, 01830

Ecological Information:

N/P

Section 13 - Disposal Considerations  
HAVOLINE MOTOR OIL SAE 30, 01830

Waste Disposal Methods:  
DISPOSE OF I/A/W FEDERAL, STATE AND LOCAL REGULATIONS (FP N). IT IS  
RESPONSIBILITY OF USER TO DETERMINE IF PRODUCT IS HAZARDOUS WASTE.

Section 14 - MSDS Transport Information  
HAVOLINE MOTOR OIL SAE 30, 01830

Transport Information:  
N/P

Section 15 - Regulatory Information  
HAVOLINE MOTOR OIL SAE 30, 01830

SARA Title III Information:  
N/P

Federal Regulatory Information:  
N/P

State Regulatory Information:  
N/P

Section 16 - Other Information  
HAVOLINE MOTOR OIL SAE 30, 01830

Other Information:  
N/P

HMIS Transportation Information  
Product Identification: HAVOLINE MOTOR OIL SAE 30, 01830  
Transportation ID Number: 91200  
Responsible Party CAGE: FO311  
Date MSDS Prepared: 02/21/1990  
Date MSDS Reviewed: 11/16/1991  
MFN: 11/16/1991  
Submitter: N TN

Status Code: C

Container Information

Unit of Issue:  
Container Quantity:  
Type of Container:  
Net Unit Weight:  
Article without MSDS: N  
Technical Entry NOS Shipping Number:  
Radioactivity:  
Form:  
Net Explosive Weight:  
Coast Guard Ammunition Code:  
Magnetism: N/P  
AF MMAC Code:  
DOD Exemption Number:  
Limited Quantity Indicator:  
Multiple Kit Number: 0  
Kit Indicator: N  
Kit Part Indicator: N  
Review Indicator: Y  
Additional Data:  
NOT REGULATED FOR TRANSPORTATION

Department of Transportation Information

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
DOT PSN Code: ZZZ  
Symbols: N/R  
DOT PSN Modifier:  
Hazard Class: N/R  
UN ID Number: N/R  
DOT Packaging Group: N/R  
Label: N/R  
Special Provision(s): N/R  
Packaging Exception: N/R  
Non Bulk Packaging: N/R  
Bulk Packaging: N/R  
Maximum Quantity in Passenger Area: N/R  
Maximum Quantity in Cargo Area: N/R  
Stow in Vessel Requirements: N/R  
Requirements Water/Sp/Other: N/R

IMO Detail Information

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION  
IMO PSN Code: ZZZ  
IMO PSN Modifier:  
IMDG Page Number: N/R

UN Number: N/R  
UN Hazard Class: N/R  
IMO Packaging Group: N/R  
Subsidiary Risk Label: N/R  
EMS Number: N/R  
Medical First Aid Guide Number: N/R

#### IATA Detail Information

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
IATA PSN Code: ZZZ  
IATA PSN Modifier:  
IATA UN Id Number: N/R  
IATA UN Class: N/R  
Subsidiary Risk Class: N/R  
UN Packaging Group: N/R  
IATA Label: N/R  
Packaging Note for Passengers: N/R  
Maximum Quantity for Passengers: N/R  
Packaging Note for Cargo: N/R  
Maximum Quantity for Cargo: N/R  
Exceptions: N/R

#### AFI Detail Information

AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
AFI Symbols:  
AFI PSN Code: ZZZ  
AFI PSN Modifier:  
AFI UN Id Number: N/R  
AFI Hazard Class: N/R  
AFI Packing Group: N/R  
AFI Label: N/R  
Special Provisions: N/A  
Back Pack Reference: N/A

#### HAZCOM Label Information

Product Identification: HAVOLINE MOTOR OIL SAE 30, 01830  
CAGE: FO311  
Assigned Individual: Y  
Company Name: TEXACO, INC  
Company PO Box: 509  
Company Street Address1: N/K  
Company Street Address2: BEACON, NY 12508 NK  
Health Emergency Telephone: 914-831-3400, EXT 204  
Label Required Indicator: Y  
Date Label Reviewed: 09/26/1991  
Status Code: C  
Manufacturer's Label Number:  
Date of Label: 09/26/1991

Year Procured: N/K

Organization Code: G

Chronic Hazard Indicator: Y

Eye Protection Indicator: YES

Skin Protection Indicator: YES

Respiratory Protection Indicator: YES

Signal Word: CAUTION

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: Slight

Reactivity Hazard: None

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## GREASE,GENERAL PURPOSE

Division of Facilities Services  
DOD Hazardous Material Information (ANSI Format)  
For Cornell University Convenience Only

## GREASE,GENERAL PURPOSE

Section 1 - Product and Company Identification Section 9 - Physical &  
Chemical Properties  
Section 2 - Compositon/Information on Ingredients Section 10 - Stability &  
Reactivity Data  
Section 3 - Hazards Identification Including Emergency Overview Section 11  
- Toxicological Information  
Section 4 - First Aid Measures Section 12 - Ecological Information  
Section 5 - Fire Fighting Measures Section 13 - Disposal Considerations  
Section 6 - Accidental Release Measures Section 14 - MSDS Transport  
Information  
Section 7 - Handling and Storage Section 15 - Regulatory Information  
Section 8 - Exposure Controls & Personal Protection Section 16 - Other  
Information

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## Section 1 - Product and Company Identification GREASE,GENERAL PURPOSE

Product Identification: GREASE,GENERAL PURPOSE  
Date of MSDS: 01/01/1985 Technical Review Date: 06/09/1980  
FSC: 9150 NIIN: 00-273-2374  
Submitter: D DG  
Status Code: C  
MFN: 01



Article: N  
Kit Part: N

#### Manufacturer's Information

Manufacturer's Name: SOUTHWEST PETRO-CHEM INC  
Manufacturer's Address1:  
Manufacturer's Address2: N/P, NK 00000  
Manufacturer's Country: NK  
General Information Telephone:  
Emergency Telephone: 913-782-5800  
Emergency Telephone: 913-782-5800  
MSDS Preparer's Name: N/P  
Proprietary: N  
Reviewed: Y  
Published: Y  
CAGE: 70878  
Special Project Code: N

#### Item Description

Item Name: GREASE,GENERAL PURPOSE  
Item Manager: S9G  
Specification Number: VV-G-632  
Type/Grade/Class: NK  
Unit of Issue: CN Quantitative Expression: 00000000035LB  
Unit of Issue Quantity: 1  
Type of Container: PAIL

#### Contractor Information

Contractor's Name: EXXON CO USA-SOUTHWEST GREASE BUSINESS UNIT  
Post Office Box: 1974  
Contractor's Address1: 1400 S HARRISON  
Contractor's Address2: OLATHE, KS 66061  
Contractor's Telephone: 913-656-3701/800-424-9300(CHEMTREC)  
Contractor's CAGE: 70878

#### Section 2 - Compositon/Information on Ingredients GREASE,GENERAL PURPOSE

Ingredient Name: PETROLEUM HYDROCARBONS  
Ingredient CAS Number: Ingredient CAS Code: X  
RTECS Number: RTECS Code: X  
=WT: =WT Code:  
=Volume: =Volume Code:  
>WT: >WT Code:

>Volume: >Volume Code:  
<WT: <WT Code:  
<Volume: <Volume Code:  
% Low WT: % Low WT Code:  
% High WT: % High WT Code:  
% Low Volume: % Low Volume Code:  
% High Volume: % High Volume Code:  
% Text: 100  
% Enviromental Weight:  
Other REC Limits: N/P  
OSHA PEL: N/P OSHA PEL Code:  
OSHA STEL: OSHA STEL Code:  
ACGIH TLV: UNKNOWN ACGIH TLV Code: M  
ACGIH STEL: N/P ACGIH STEL Code:  
EPA Reporting Quantity:  
DOT Reporting Quantity:  
Ozone Depleting Chemical:

### Section 3 - Hazards Identification, Including Emergency Overview GREASE,GENERAL PURPOSE

Health Hazards Acute & Chronic: N/P

Signs & Symptoms of Overexposure:  
POSSIBLE SKIN AND EYE IRRITATION WITH PROLONGED CONTACT

Medical Conditions Aggravated by Exposure:  
N/P

LD50 LC50 Mixture: N/P

Route of Entry Indicators:  
Inhalation: N/P  
Skin: N/P  
Ingestion: N/P  
Carcenogenicity Indicators  
NTP: N/P  
IARC: N/P  
OSHA: N/P  
Carcinogenicity Explanation: N/P

#### Section 4 - First Aid Measures GREASE,GENERAL PURPOSE

First Aid:  
EYES:FLUSH WITH PLENTY OF WATER.CALL A PHYSICIAN IMMEDIATELY. SKIN CONTACT:WASH WITH SOAP AND WATER.IF SWALLOWED:CALL A PHYSICIAN IMMEDIATELY.

#### Section 5 - Fire Fighting Measures GREASE,GENERAL PURPOSE

Fire Fighting Procedures:  
FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS  
Unusual Fire or Explosion Hazard:  
N/P  
Extinguishing Media:  
DRY CHEMICAL,CO\*2,FOAM  
Flash Point: Flash Point Text: 350F COC

Autoignition Temperature:  
Autoignition Temperature Text: N/A  
Lower Limit(s):  
Upper Limit(s):

#### Section 6 - Accidental Release Measures GREASE,GENERAL PURPOSE

Spill Release Procedures:  
TRANSFER BULK OF MATERIAL INTO ANOTHER APPROVED CONTAINER.ABSORB REMAINING RESIDUE WITH PROPER ABSORBENTS.SWEEP UP AND DISPOSE AS SOLID WASTE IN ACCORDANCE WITH LOCAL,STATE, AND FEDERAL REGULATIONS

#### Section 7 - Handling and Storage GREASE,GENERAL PURPOSE

Handling and Storage Precautions:

Other Precautions:

## Section 8 - Exposure Controls & Personal Protection GREASE,GENERAL PURPOSE

Respiratory Protection:

NONE REQUIRED

Ventilation:

NONE REQUIRED

Protective Gloves:

RUBBER OR PLAST

Eye Protection: SAFETY GOGGLES OR F.SHLD.

Other Protective Equipment: N/P

Work Hygenic Practices: N/P

Supplemental Health & Safety Information: ITEM IS GRADE 2 OF FED SPEC

VV-G-632.THE MELTING PT OF ITEM IS 185F

## Section 9 - Physical & Chemical Properties GREASE,GENERAL PURPOSE

HCC: V6

NRC/State License Number:

Net Property Weight for Ammo:

Boiling Point: Boiling Point Text: N/A

Melting/Freezing Point: Melting/Freezing Text: N/A

Decomposition Point: Decomposition Text: N/A

Vapor Pressure: N/P Vapor Density: N/P

Percent Volatile Organic Content:

Specific Gravity: 0.9236

Volatile Organic Content Pounds per Gallon:

pH: N/P

Volatile Organic Content Grams per Liter:

Viscosity: N/P

Evaporation Weight and Reference: NOT DETERMINED

Solubility in Water: NEGLIGIBLE

Appearance and Odor: AMBER SEMI-SOLID WITH USUAL PETROLEUM OIL ODOR

Percent Volatiles by Volume: N/P

Corrosion Rate: N/P

## Section 10 - Stability & Reactivity Data

## GREASE,GENERAL PURPOSE

Stability Indicator: YES

Materials to Avoid:

STRONG OXIDIZING AGENTS SUCH AS CHROMIC ACID,BROMINE,H\*2O\*2

Stability Condition to Avoid:

N/P

Hazardous Decomposition Products:

DENSE SMOKE,CO,CO\*2, & POSSIBLY OTHER UNKNOWN ORGANIC COMPDS

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

N/P

## Section 11 - Toxicological Information

### GREASE,GENERAL PURPOSE

Toxicological Information:

N/P

## Section 12 - Ecological Information

### GREASE,GENERAL PURPOSE

Ecological Information:

N/P

## Section 13 - Disposal Considerations

### GREASE,GENERAL PURPOSE

Waste Disposal Methods:

PUT INTO AN APPROVED STORAGE CONTAINER AND SHIP TO AN APPROVED DISPOSAL AREA

## Section 14 - MSDS Transport Information

### GREASE,GENERAL PURPOSE

Transport Information:

N/P

Section 15 - Regulatory Information

GREASE,GENERAL PURPOSE

SARA Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Section 16 - Other Information

GREASE,GENERAL PURPOSE

Other Information:

N/P

HMIS Transportation Information

Product Identification: GREASE,GENERAL PURPOSE

Transportation ID Number: 64733

Responsible Party CAGE: 70878

Date MSDS Prepared: 01/01/1985

Date MSDS Reviewed: 06/09/1980

MFN: 06/09/1980

Submitter: D DG

Status Code: C

Container Information

Unit of Issue: CN

Container Quantity: 1

Type of Container: PAIL

Net Unit Weight:

Article without MSDS: N

Technical Entry NOS Shipping Number:

Radioactivity:

Form:

Net Explosive Weight:

Coast Guard Ammunition Code:

Magnetism: N/P

AF MMAC Code:  
DOD Exemption Number:  
Limited Quantity Indicator:  
Multiple Kit Number: 0  
Kit Indicator: N  
Kit Part Indicator: N  
Review Indicator: Y  
Additional Data:

#### Department of Transportation Information

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
DOT PSN Code: ZZZ  
Symbols: N/R  
DOT PSN Modifier:  
Hazard Class: N/R  
UN ID Number: N/R  
DOT Packaging Group: N/R  
Label: N/R  
Special Provision(s): N/R  
Packaging Exception: N/R  
Non Bulk Packaging: N/R  
Bulk Packaging: N/R  
Maximum Quantity in Passenger Area: N/R  
Maximum Quantity in Cargo Area: N/R  
Stow in Vessel Requirements: N/R  
Requirements Water/Sp/Other: N/R

#### IMO Detail Information

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION  
IMO PSN Code: ZZZ  
IMO PSN Modifier:  
IMDG Page Number: N/R  
UN Number: N/R  
UN Hazard Class: N/R  
IMO Packaging Group: N/R  
Subsidiary Risk Label: N/R  
EMS Number: N/R  
Medical First Aid Guide Number: N/R

#### IATA Detail Information

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
IATA PSN Code: ZZZ  
IATA PSN Modifier:  
IATA UN Id Number: N/R  
IATA UN Class: N/R

Subsidiary Risk Class: N/R  
UN Packaging Group: N/R  
IATA Label: N/R  
Packaging Note for Passengers: N/R  
Maximum Quantity for Passengers: N/R  
Packaging Note for Cargo: N/R  
Maximum Quantity for Cargo: N/R  
Exceptions: N/R

#### AFI Detail Information

AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
AFI Symbols:  
AFI PSN Code: ZZZ  
AFI PSN Modifier:  
AFI UN Id Number: N/R  
AFI Hazard Class: N/R  
AFI Packing Group: N/R  
AFI Label: N/R  
Special Provisions: N/A  
Back Pack Reference: N/A

#### HAZCOM Label Information

Product Identification: GREASE,GENERAL PURPOSE  
CAGE: 70878  
Assigned Individual: N  
Company Name: EXXON CO USA-SOUTHWEST GREASE BUSINESS UNIT  
Company PO Box: 1974  
Company Street Address1: 1400 S HARRISON  
Company Street Address2: OLATHE, KS 66061 US  
Health Emergency Telephone: 913-782-5800  
Label Required Indicator: Y  
Date Label Reviewed: 12/16/1998  
Status Code: C  
Manufacturer's Label Number:  
Date of Label: 12/16/1998  
Year Procured: N/K  
Organization Code: G  
Chronic Hazard Indicator: N/P  
Eye Protection Indicator: N/P  
Skin Protection Indicator: N/P  
Respiratory Protection Indicator: N/P  
Signal Word: N/P  
Health Hazard:  
Contact Hazard:  
Fire Hazard:  
Reactivity Hazard:



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