MATERIAL SAFETY DATA SHEET/FICHE SIGNALETIQUE

Section 1—PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly-Drill 133-X

PRODUCT DESCRIPTION: LIQUID ANIONIC POLYMER

CHEMICAL DESCRIPTION:

Polymer, Surfactant(s), Water, Hydrocarbon solvent

UPDATED: June 01, 2002

NFPA704M/WHMIS RATING

HEALTH: 0/0 0/1

FLAMMABILITY:

1/1

REACTIVITY:

0=Insignificant

1=Slight

2=Moderate

3=High

4=Extreme

SECTION 2—COMPOSITION

A liquid polymer: Evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations. None of the substances in this product are hazardous.

SECTION 3—PHYSICAL DATA

Flash Point: >100°C (PMCC)

Specific Gravity (@ 25°C.): 1.08

Solubility in Water: Emulsifiable

pH: 8.1 (1.0% solution)

Freeze Point: -10 °C (14 Degrees F)

Density (g/ml): 1.08 at 25 °C

Physical State: Liquid

Appearance: Blue liquid

Odor: Hydrocarbon

Note: These physical properties are typical values for this product.

SECTION 4--FIRE AND EXPLOSION DATA

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. Chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, oxides of carbon (COx), oxides of nitrogen (NOx) may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 5—FIRE FIGHTING MEASURES

FLASH POINT: >100°C (PMCC)

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For larger fires, use water spray or fog, thoroughly drenching the burning material.

UNSUITABLE EXTINGUISHING MEDIA: Do not use water unless flooding amounts are available.

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve oxides of nitrogen (NOx) under fire conditions.

SECTION 6—HEALTH HAZARD DATA

EMERGENCY OVERVIEW:

CAUTION: May cause irritation to skin and eyes. Avoid contact with skin, eyes and clothing. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

PRIMARY ROUTE(S) OF EXPOSURE: Eye & Skin

EYE CONTACT: Can cause mild to moderate irritation

SKIN CONTACT: Can cause mild, short-lasting irritation

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

SECTION 7—EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.

INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician.

INGESTION: Do not induce vomiting: Call a physician immediately.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water. Call for medical assistance immediately.

SECTION 8—HANDLING, ACCIDENTAL RELEASE MEASURES & DISPOSAL CONSIDERATIONS

Storage: Keep container tightly closed when not in use.

DISPOSAL:

In Ontario, the waste class under Regulation 347 is: 233L

SMALL SPILLS:

Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area.

LARGE SPILLS:

Contain liquid using absorbent material, by digging trenches or by dyking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated.

Dispose of wastes in an approved incinerator or waste treatment/disposal site, in accordance with all applicable regulations. Do not dispose of wastes in local sewer or with normal garbage.

ENVIRONMENTAL PRECAUTIONS

This product should NOT be directly discharged into lakes, ponds, streams, waterways or public water supplies.

As a non-hazardous liquid waste, it should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. A

non-hazardous liquid waste can also be incinerated in accordance with local, state, provincial and federal regulations.

SECTION 9—INDUSTRIAL HYGIENE CONTROL MEASURES

OCCUPATIONAL EXPOSURE LIMITS:

This product does not contain any substance that has an established exposure limit.

Respiratory Protection: None normally required.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a positive pressure, self-contained breathing apparatus is recommended.

Ventilation: General ventilation is recommended.

Eye Protection: Safety glasses, if personally preferred

Gloves: Generally not necessary. Personal preference. Examples of impermeable gloves available on the market are neoprene, nitrile, PVC, natural rubber, viton, and butyl (compatibility studies have not been performed).

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

SECTION 10—TOXICOLOGICAL PROPERTIES

SENSITIZATION:

mg/L

This product is not expected to be a sensitizer.

A "LC50-96" Pass/Fail Bioassay test. This test determines the lethality of a fluid on young aquatic organisms . The fluid fails if 50% or more of the animals are dead after 96 hours in the fluid.

i. 96 hour static acute LC50 to Rainbow Trout = Greater than 1,000

96 hour no observed effect concentration = 125 mg/L based on no mortality or abnormal effects

ii. 96 hour static acute LC50 to Sheepshead Minnow = Greater than 1,000 mg/L

96 hour no observed effect concentration ≈ 1,000 mg/L (highest concentration tested) based on no mortality or abnormal effects.

iii. 96 hour static acute LC50 to Mysid Shrimp = 400 mg/L

96 hour no observed effect concentration = 180 mg/L based on no mortality or abnormal effects.

iv. 96 hour static acute LC50 to Daphnia Magna - 400 mg/L

96 hour no observed effect concentration = 56 mg/L (lowest concentration tested) based on no mortality or abnormal effects.

Microtoxicity

Test Method: Luminescent Bacteria, IC50@ 15 min

Reference: Appendix 1: Microtox Bioassay Procedure, Drilling Waste

Management, Guide G50. 1993. Alberta Energy and Utilities Board,

Calgary, AB, Canada.

Sample: Poly Drill 1330, sample #97324-1 for test #970723, 97/05/09 by

D. Lintott

Preparation: Sample was diluted to 2 g/L, which formed thick, slightly cloudy liquid.

The sample was then centrifuged for 1 hour.

Test Results:

SAMPL E	TREATMEN T	%CT L	IC20%	IC5 0%	RESULT
97324-1	None	N/A	14 (9-22)	>9 1	PASS

The following results are for a 1% aqueous solution of a similar product.

CARCINOGENCITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Government Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION:

Based on our Hazard Characterization, the potential human hazard is: LOW

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION:

Based on our Hazard Characterization, the potential environmental hazard is: LOW.

SECTION 11—DEPARTMENT OF TRANSPORTATION INFORMATION

PROPER SHIPPING NAME/HAZARD CLASS MAY VARY BY PACKAGING, PROPERTIES, AND MODE OF TRANSPORTATION. TYPICAL PROPER SHIPPING NAMES FOR THIS PRODUCT ARE:

ALL TRANSPORTATION MODES:

PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Shipping Name: Drilling Mud

Hazard Class: Not hazardous

Cautionary Labeling: None required

MATERIAL SAFETY DATA SHEET/FICHE SIGNALETIQUE

Section 1—PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly Drill O.B.X. (O.B.X.-G) & (1-2-F)

WHMIS CLASSIFICATION: Non-regulated

TDG Classification: Non dangerous goods

SECTION 2—COMPOSITION

A liquid polymer containing guar gum, mineral oil, vegetable oil, acrylamide copolymer and a surfactant: Evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations.

SECTION 3—PHYSICAL DATA

Boiling Point: Not available

Specific Gravity: 0.9 g/cm

Solubility in Water: disperses in water(forms viscous, slippery solution).

pH: 3.8 (1% concentration)

Density (g/ml): Not available

Physical State: Liquid

Appearance and Odor: Brown. Odor slight.

SECTION 4--FIRE AND EXPLOSION DATA

Flash Point (method used): (PMCC) greater than 100 C.

Conditions of flammability: Very low risk.

Hazardous combustion products: None known.

Upper and Lower flammable limits: Not available.

Extinguishing media: Carbon dioxide, dry chemicals, foam, in preference to

water spray

SECTION 5—REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur.

Incompatible substances: Avoid strong oxidants such as liquid chloine, concentrated oxygen, sodium or calcium hypochloride.

Hazardous decomposition products: None known

SECTION 6—HEALTH HAZARD DATA

TOXICITY RATING: Practically non-harmful.

Routes of Exposure and Effects:

SKIN: Slight irritant: prolonged contact may cause skin irritation or dermatitis in some individuals

EYE: No effects of exposure expected with the exception of possible irritation.

INHALATION: Due to low volatility of mineral distillates a small inhalation hazard exists.

INGESTION: can cause nausea, vomiting, cramps, diarrhea

Chronic exposure limits: None

Sensitization of product: Not suspected to be a sensitizer.

Teratongenicity: Not available.

Mutagenicity: Not available.

Carcinogenicity: None of the components of thisproduct are listed as

carcinogens by IARC and ACGIH

SECTION 7—EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.

INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician.

INGESTION: Don not induce vomiting: Call a physician immediately.

SECTION 8—HANDLING AND USE PRECTIONS

Storage requirements: keep container closed when not in use. Store in a cool dry location away from oxidizing and reducing agents.

Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations.

Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

SECTION 9—INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: None normally required.

Ventilation: If mist and/or vapors are present, use air purifying respirator of self

contained breathing apparatus, but this is rarely required.

Eye Protection: Safety glasses, if personally preferred

Gloves: Generally not necessary. Personal prefeence.

SECTION 10—TOXICOLOGICAL PROPERTIES

G50 Microtox Analysis prepared by HydroQual Laboratories, Calgary, AB-97/6/26 Test#970978:

Test Description EC20 EC50 Pass/Fail

MTX >91 >91 Pass

SECTION 11—DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Drilling Mud

Hazard Class: Not hazardous

Hazardous Substances: None

Cautionary Labeling: None required

JET FUEL A

Product and Company Identification

Composition/Information on

Ingredients

Hazards Identification First Aid Measures Fire Fighting Measures

Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity

Toxicological Information **Ecological Information**

Disposal Considerations Transport Information

Regulatory Information

Other Information / Hazmat Info / Hazcom

Label

MSDS Safety Information

FSC: 9130

NIIN: 00-359-2026

MSDS Date: 04/22/1990 MSDS Num: BMZVF

Submitter: DDG

ID: Article: N Tech Review: 06/25/1992

Status CD: C

Product JET FUEL A

Kit N

MFN: 01

Part:

Cage: 81230

Name: CHEVRON US A INC

Address: 575 MARKET ST

City: SAN FRANCISCO

Box: 7643

State: CA

Zip: 94120

Country: US

Responsible Party

Info Phone Number: 800-457-2022

Emergency Phone Number: 800-457-2022

Preparer's Name: N/P

Proprietary Ind: N

Review Ind: Y

Published: Y

Special Project CD: N

Contractor Summary

Cage: 81230

Name: CHEVRON PRODUCTS COMPANY

Address: 575 MARKET ST

City: SAN FRANCISCO

State: CA

Zip: 94105-2856

Country: US

Phone: 800-689-3998

Cage: 2H441

Name: GARRETT CORP (800-457-2022)

Address: UNKNOWN

City: UNKNOWN

State: NK

Zip: 00000

Country: NK

Phone: UNKNOWN

Cage: 5D566

Name: MONTGOMERY AVIATION CORP.

Address: UNKNOWN

State: AL

Box: 92

City: MONTGOMERY

Zip: 36101-0092

Country: US Phone: 205-288-7334

= Item Description Information =

Item Manager: S9G

Item Name: TURBINE FUEL, AVIATION

Type/Grade/Class: JET A Specification Number: ASTM D1655

Unit of Issue: GL Quantitative Expression: NK UI Container Oty: BULK Type of Container: BULK

Ingredients

TOP

Code:

Code: X Cas: RTECS #: 1002017FA Code: M

Name: JET A TURBINE FUEL (CONTAINS CAS 8008-20-6 (KEROSENE), AND

OTHER MIDDLE DISTILLATES.

Environmental Wt: % Text: >97

Other REC Limits: NONE SPECIFIED

OSHA OSHA PEL: 100 PPM (STODDARD) Code: M Code: STEL:

ACGIH N/P ACGIH TLV: 100 PPM (STODDARD) Code: M

STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Cas: 91-20-3 Code: M RTECS #: QJ0525000 Code: M

Name: NAPHTHALENE (SARA III)

Environmental Wt: % Text: <3

Other REC Limits: NONE SPECIFIED

STEL:

OSHA PEL: 10 PPM/15 STEL OSHA Code: M Code:

ACGIH N/P Code:

ACGIH TLV: 10 PPM/15 STEL; 9192 Code: M STEL:

DOT Rpt 100 LBS EPA Rpt Qty: 100 LBS

Qty:

Ozone Depleting Chemical: N

Health Hazards Data

LD50 LC50 Mixture LD 50 ORAL RAT IS > 5 ML/KG

Route Of Entry Inds - Inhalation: YES Skin: NO Ingestion: NO

Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO

Health Hazards Acute And Chronic

ACUTE: INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS. ASPIRATION OF OIL INTO LUNGS AFTER INGESTION MAY CAUSE PNEUMONITIS WHICH MAY BE FATAL. CHRONIC: EYE AND SKIN IRRITATION, DERMATITIS.

Explanation Of Carcinogenicity

MANUFACTURER STATES ANIMAL SKIN TESTS HAVE PRODUCED SKIN CANCER, TUMORS AND KIDNEY DAMAGE IN RODENTS.

Signs And Symptions Of Overexposure

EYE/SKIN: IRRITATION. INHALATION: HEADACHE, DIZZINESS, LOSS OF APPETITE, WEAKENESS, AND LOSS OF COORDINATION. INGESTION: IRRITATION.

Medical Cond Aggravated By Exposure

PRE-EXISTING RESPIRATORY, KIDNEY, CENTRAL NERVOUS SYSTEM OR SKIN DISEASES MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

First Aid Information

EYES: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, IF IRRITATION PERSISTS, SEE DOCTOR. SKIN: WIPE EXCESS OIL OFF WITH A DRY CLOTH. WASH WITH SOAP AND WATER WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. INHALATION: REMOVE VICTIM TO FRESH AIR. GIV OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY.

Spill Release Procedures

REMOVE PERSONNEL. ELIMINATE IGNITION SOURCES, VENTILATE AREA, WEAR PROTECTIVE CLOTHING AND EOUIPMENT, STOP LEAK IF IT CAN BE DONE SAFELY. CONTAIN SPILL. ABSORB IN INERT MATERIAL AND PLACE IN APPROPIATE DISPOSAL CONTAINER. WASH AREA WITH SOA P & WATER.

Neutralizing Agent

NOT APPLICABLE

Waste Disposal Methods TOP

CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER, DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. CONTAMINATED ABSORBENT MATERIAL MAY BE DISPOSED OF IN APPROVED CHEMICAL WASTE LANDFILLS. RCRA HAZARDOUS WASTE NUMBER D001.

Handling and Storage Precautions

STORE IN CLOSED CONTAINERS OR TANKS IN WELL VENTILATED AREA. KEEP AWAY FROM EXCESSIVE HEAT, IGNITION SOURCES OR OXIDIZERS. DO NOT CUT OR WELD CONTAINR

Other Precautions

PROTECT CONTAINERS FROM PHYSICAL DAMAGE. USE NON-SPARKING TOOLS AND EXPLOSION-PROOF EQUIPMENT. PREVENT STATIC ELECTRICSPARKS. PROCEDURES FOR SLOW INITIAL LOADING RATE MUST BE FOLLOWED. NOSMOKING IN AREAS OF USE.

Fire and Explosion Hazard Information

Flash Point Method: TCC

Flash Point: Flash Point Text: 100F,38C

Autoignition Temp: Autoignition Temp Text: N/A

Lower Limits: UNKNOWN Upper Limits: UNKNOWN

Extinguishing Media

USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. WATER STREAM MAY SPLASH AND SPREAD FLAMING LIQUIDS.

Fire Fighting Procedures

FIREFIGHTERS WEAR SELF-CONTAINED BREATHING APPARATUES AND PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Unusual Fire/Explosion Hazard

INVISIBLE VAPOR SPREADS EASILY AND CAN CATCH FIRE AND BURN WITH EXPLOSIVE VIOLENCE. FIRE HAZARD IS GREATER AS LIQUID TEMPERATURE RISES ABOVE 85F.

Control Measures

TOP

Respiratory Protection

NIOSH/MSHA-APPROVED RESPIRATOR OR SCBA AS APPROPIATE FOR EXPOSURE OF CONCERN.

Ventilation

EXPLOSION-PROOF MECHANICAL (GENERAL) VENTILATION.

Protective Gloves

NEOPRENE OR NITRILE RUBBER GLOVES.

Eye Protection

CHEMICAL SAFETY GOGGLES.

Other Protective Equipment

PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT. EYE BATH AND SAFETY SHOWER.

Work Hygienic Practices

DO NOT WEAR OIL CONTAMINATED CLOTHING. DO NOT PUT OILY RAGS INTO POCKETS. WASH AFTER HANDLING AND BEFORE EATING,

Supplemental Safety and Health

DO NOT USE IN PORTABLE KEROSENE HEATERS DESIGNED FOR K-1, OR IN UNVENTED HEATERS, TOXIC FUMES MAY ACCUMULATE AND CAUSE DEATH.

Physical/Chemical Properties

TOP

HCC: F4 NRC/State LIC No: N/R

Net Prop WT For Ammo: N/R

Boiling Point: B.P. Text: 400F,204C

Melt/Freeze Pt: M.P/F.P Text: N/R

Decomp Temp: Decomp Text: UNKNOWN

Vapor Pres: LOW Vapor Density: >1

Volatile Org Content %: Spec Gravity: 0.85

VOC Pounds/Gallon: PH: N/R

VOC Grams/Liter: Viscosity: N/P

Evaporation Rate & LOW

Reference:

Solubility in Water: INSOLUBLE.

Appearance and Odor: PALE YELLOW LIQUID

Percent Volatiles by Volume: 100 Corrosion Rate: N/R

Seton Resource Center

Allow access to non-virtual folders: 0

Reactivity Data TOP

Stability Indicator: YES

Stability Condition To Avoid: HIGH HEAT, OPEN FLAMES AND OTHER

SOURCES OF IGNITION

Materials To Avoid: STRONG OXIDIZING AGENTS.

Hazardous Decomposition CARBON MONOXIDE, CARBON DIOXIDE,

Products: THICK BLACK SMOKE AND UNDETERMINED

HYDROCARBON COMPOUNDS DURING

COMBUSTION.

Hazardous Polymerization NO

Indicator:

Conditions To Avoid NOT APPLICABLE

Polymerization:

Toxicological Information TOE

Toxicological Information: N/P

Ecological Information TO

Ecological: N/P

MSDS Transport Information TO

Transport Information: N/P

Regulatory Information TO

Sara Title III Information: N/P
Federal Regulatory Information: N/P
State Regulatory Information: N/P

Other Information TO

Other N/P Information:

HMIS Transportation Information

nation <u>TOP</u>

Responsible Party Cage: 81230 Trans ID NO: 70146

Product ID: JET FUEL A

MSDS Prepared Date: 04/22/1990 Review Date: 11/07/1992

MFN: 1

Submitter: D DG Status CD: C

Article W/O MSDS: N Tech Entry NOS Shipping Nm: FUEL,

AVIATION, TURBINE, JET FUEL

A.

Radioactivity: Form:

Net Explosive Weight:

Coast Guard AMMO Code: Magnetism: N/P

Net Unit Weight: AF MMAC Code:

DOD Exemption NUM: Limited Quantity IND:

Multiple KIT Number: 0 Kit IND: N

Kit Part IND: N Review IND: Y

Unit Of Issue: GL Container QTY: BULK

Type Of Container: BULK

Additional Data:

Detail DOT Information

DOT PSN Code: DPM Symbols: D

DOT Proper Shipping Name: COMBUSTIBLE LIQUID, N.O.S

DOT PSN Modifier:

Hazard Class: COMB LIQ UN ID Num: NA1993

DOT Packaging Group: III

Label: NONE

Special Provision: T1

Packaging Exception: 150

Non Bulk Pack: 203 Bulk Pack: 241

Max Qty Pass: 60 L Max Qty 220 L

Cargo:

Vessel Stow Req: A Water/Ship/Other Req:

Detail IMO Information

IMO PSN Code: HIA

IMO Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. o

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 MED First Aid Guide NUM: T

Detail IATA Information

IATA PSN Code: MCA IATA UN ID 1993

NUM:

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

IATA PSN Modifier:

IATA UN Class: 3 Subsidiary Risk Class:

IATA Label: FLAMMABLE LIQUID

UN Packing Group: III Packing Note Passenger: 309
Max Quant Pass: 60L Max Quant Cargo: 220L

Packaging Note Cargo: 310 Exceptions:

Detail AFI Information

AFI Symbols: *

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

AFI PSN Modifier:

AFI PSN Code: MCA

AFI Hazard Class: 3 AFI UN ID NUM: UN1993

TOP

AFI Packing Group: [[]

AFI Label:

Special Provisions: P5

Back Pack
Reference: A7.3

HMIS HAZCOM Label

TOP

Product ID: JET FUEL A

Cage: 81230

Assigned IND: N

Company CHEVRON PRODUCTS COMPANY

Name:

Street: 575 MARKET ST

PO Box:

City: SAN FRANCISCO

State: CA

Zipcode: 94105-2856

Country: US

Health Emergency Phone: 205-288-7334

Label Required IND: Y

Date Of Label Review: 06/25/1992

Status Code: C

MFG Label NO: N/R

Label Date: 06/25/1992

Year Procured: N/K

Origination Code: F

Chronic Hazard IND: N/P

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: WARNING

Respiratory Protection IND: N/P

Health Hazard: Moderate

Contact Hazard: Slight

Fire Hazard: Moderate

Reactivity Hazard: None

Hazard And Precautions

ACUTE: INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS. ASPIRATION OF OIL INTO LUNGS AFTER INGESTION MAY CAUSE PNEUMONITIS WHICH MAY BE FATAL. CHRONIC: EYE AND SKIN IRRITATION, DERMATITIS. FIRST AID: EYES: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MNUTES. IF IRRITATION PERSISTS, SEE DOCTOR. SKIN: WIPE EXCESS OIL OFF WITH A DRY CLOTH. WASH WITH SOAP AND WATER WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY.

GASOLINE (UNLEADED, OXYGENATED)

Product and Company Identification

Composition/Information on Ingredients

Hazards Identification First Aid Measures

Fire Fighting Measures

Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity Toxicological Information

Ecological Information

Disposal Considerations

Transport Information

Regulatory Information

Other Information / Hazmat

Info / Hazcom Label

MSDS Safety Information

TOP

FSC: 9130

NIIN: 01-208-

MSDS Date: 03/11/1992 MSDS Num: BRGMJ

4172

Submitter: D DG

Tech Review: 07/28/1993

Status CD: C

Product GASOLINE (UNLEADED, OXYGENATED)

MFN: 02

Article: N

Kit N Part:

Responsible Party

Cage: 4K236

Name: NAVAJO REFINING CO

Address: 501 E MAIN - DRAWER 159

State: NM

Zip: 88210-0159

Country: US

Info Phone Number: 505-748-3311

Emergency Phone Number: 505-748-3311/800-424-9300(CHEMTREC)

Preparer's Name: N/P

Proprietary Ind: N

Review Ind: Y

Published: Y

Special Project CD: N

Contractor Summary

City: ARTESIA

Cage: 0BMM6 Name: BIG BEAR OIL CO INC

Address: 421 FREDRICK ST

State: TX

Box: 2036

City: EL PASO

Zip: 79950

Country: US

Phone: 915-775-1945

Cage: 4K236

Name: NAVAJO REFINING COMPANY

Address: UNKNOWN

Box: 159

City: ARTESIA

State: NM

Zip: 88211-0159

Country: US

Phone: 505-748-3311

= Item Description Information =

Item Manager: S9G

Item Name: GASOLINE, UNLEADED

Specification Number: VV-G-1690 Type/Grade/Class: CIVGAS

Quantitative Expression: 00000000055GL Unit of Issue: DR UI Container Qty: 55 GALLONS Type of Container: DRUM, 18 GAGE

Ingredients

TOP

Cas: 8006-61-9 Code: M RTECS #: LX3300000 Code: M

Name: GASOLINE

Environmental Wt: % Text: 100

Other REC Limits: NONE RECOMMENDED

STEL:

OSHA OSHA PEL: 300 PPM/500 STEL Code: M Code:

ACGIH N/P ACGIH TLV: 300 PPM/500STEL;9293 Code: M Code: STEL:

DOT Rpt EPA Rpt Qty: Qty:

Ozone Depleting Chemical: N

Cas: 1634-04-4 Code: M RTECS #: KN5250000 Code: M

Name: METHYL TERT-BUTYL ETHER (SARA III) (CONTAINED IN GASOLINE)

% Text: 10-11 Environmental Wt:

Other REC Limits: NONE RECOMMENDED

Code:

OSHA PEL: NOT ESTABLISHED Code: M OSHA

ACGIH N/P ACGIHTLV: NOT ESTABLISHED Code: M Code:

STEL:

DOT Rpt 1 LB EPA Rpt Qty: 1 LB

Qty:

STEL:

Ozone Depleting Chemical: N

Cas: Code: X RTECS #: AZ0875400 Code: M

Name: DENATURED ALCOHOL (CONTAINED IN GASOLINE)

% Text: 6-10 Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 1000 PPM (ETHANOL) Code: M OSHA Code:

STEL: ACGIH TLV: 1000 PPM (ETHANOL) Code: M Code:

ACGIH N/P STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: 71-43-2 RTECS #: CY1400000 Code: M Code: M

Name: BENZENE (SARA III) (CONTAINED IN GASOLINE)

% Text: 1-5 Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 1PPM/5STEL:1910.1028 Code: M

OSHA STEL:

Code:

ACGIH TLV: 10 PPM; A2; 9293

Code: M

ACGIH N/P

Code:

EPA Rpt Qty: 10 LBS

STEL:

DOT Rpt 10 LBS

Qty:

Ozone Depleting Chemical: N

Cas: 100-41-4

Code: M

RTECS #: DA0700000 Code: M

Name: ETHYL BENZENE (SARA III) (CONTAINED IN GASOLINE)

% Text: 1-3

Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 100 PPM/125 STEL

Code: M

OSHA STEL:

Code:

ACGIH TLV: 100 PPM/125STEL 9293 Code: M

ACGIH N/P STEL:

Code:

EPA Rpt Qty: 1000 LBS

DOT Rpt 1000 LBS

Qty:

Ozone Depleting Chemical: N

Cas: 110-82-7

Code: M

RTECS #: GU6300000 Code: M

Name: CYCLOHEXANE (SARA III) (CONTAINED IN GASOLINE)

% Text: 1

Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 300 PPM

Code: M

OSHA STEL: Code:

ACGIH TLV: 300 PPM, 9293

ACGIH N/P

Code:

Code: M

STEL:

EPA Rpt Qty: 1000 LBS

DOT Rpt 1000 LBS

Qty:

Ozone Depleting Chemical: N

Cas: 108-88-3

Code: M

RTECS #: XS5250000 Code: M

Name: TOLUENE (SARA III) (CONTAINED IN GASOLINE)

% Text: 1-5

Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 200 PPM/150 STEL

Code: M

OSHA STEL: Code:

ACGIH TLV: 50 PPM; 9293

Code: M

ACGIH N/P

Code:

EPA Rpt Qty: 1000 LBS

STEL: DOT Rpt 1000 LBS

Qty:

Ozone Depleting Chemical: N

Cas: 1330-20-7 Code: M RTECS #: ZE2100000 Code: M

Name: XYLENES (O-,M-,P- ISOMERS) (SARA III) (CONTAINED IN GASOLINE)

Environmental Wt: % Text: 4-6

Other REC Limits: NONE RECOMMENDED

STEL:

Code:

OSHA PEL: 100 PPM/150 STEL **OSHA**

ACGIH N/P ACGIH TLV: 100 PPM/150STEL;9293 Code: M Code:

Code: M

STEL:

EPA Rpt Qty: 1000 LBS DOT Rpt 1000 LBS Qty:

Ozone Depleting Chemical: N

Cas: 98-82-8 Code: M RTECS #: GR8575000 Code: M

Name: CUMENE (SARA III) (CONTAINED IN GASOLINE)

% Text: 1 **Environmental Wt:**

Other REC Limits: NONE RECOMMENDED

OSHA PEL: S, 50 PPM OSHA Code: M Code: STEL:

ACGIH N/P ACGIH TLV: S. 50 PPM: 9293 Code: M Code: STEL:

DOT Rpt 5000 LBS EPA Rpt Qty: 5000 LBS

Qty:

Ozone Depleting Chemical: N

Cas: 95-63-6 Code: M RTECS #: DC3325000 Code: M

Name: 1,2,4-TRIMETHYLBENZENE (SARA III) (CONTAINED IN GASOLINE)

Environmental Wt: % Text: 1

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 25 PPM OSHA Code: M Code: STEL:

ACGIH N/P ACGIH TLV: 25 PPM; 9293 Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical: N

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: GASOLINE CONTAINS EITHER INGREDIENT 2: METHYL-TERT-BUTYL ETHER OR INGREDIENT 3: DENATURED ETHANOL.

% Text: N/R **Environmental Wt:**

Other REC Limits: NOT APPLICABLE

OSHA PEL: NOT APPLICABLE

Code: M

OSHA Code:

ACGIHTLV: NOT APPLICABLE

Code: M

ACGIH N/P

Code:

EPA Rpt Qty:

DOT Rpt Qty:

Ozone Depleting Chemical:

Health Hazards Data

TOP

LD50 LC50 Mixture TLV FOR GASOLINE IS 300 PPM.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Inds - NTP: YES

IARC: YES

OSHA: YES

Health Hazards Acute And Chronic

ACUTE: IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS. GASOLINE IF SWALLOWED, MAY BE ASPIRATED INTO LUNGS, RESULTING IN PULMONARY EDEMA AND CHEMICAL PNEUMONITIS. CHRONIC: BENZENE IS A CONFIRMED CARCINOGEN AND MAY PRODUCE BLOOD CHANGES. PROLONGE D EXPOSURE TO IGH CONCENTRATIONS HAS CAUSED KIDNEY AND LIVER CANCER IN RAT/MICE

Explanation Of Carcinogenicity

BENZENE IS A CONFIRMED CARCINOGEN BY NTP, IARC AND OSHA.

Signs And Symptions Of Overexposure

EYES/SKIN: IRRITATION. INHALATION: COUGHING, HEADACHE, DIZZINESS, MENTAL CONFUSION, BLURRED VISION, SLURRED SPEECH, WEAKNESS, RESPIRATORY ARREST, CONVULSIONS, COMA. INGESTION: IRRITATION OF GASTROINTESTINAL SYSTEM, VOMITING, SAME SYMPTOMS A S INHALATION.

Medical Cond Aggravated By Exposure

INDIVIDUALS WITH A HISTORY OF SKIN, RESPIRATORY OR CENTRAL NERVOUS SYSTEM DISORDERS MAY BE AT INCREASED RISK FROM EXPOSURE.

First Aid Information

TOP

EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH WITH SOAP AND WATER. SEE DOCTOR. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. IF LIQUID IS IN LUNGS (ASPIRATD), SEEK MEDICAL CARE. INGESTION: DO NOT INDUCE VOMITING. GIVE 1-2 GLASSES OF WATER. SEE DOCTOR IMMEDIATELY.

Spill Release Procedures

TOP

ELIMINATE IGNITION SOURCES. VENTILATE AREA. USE NON-SPARKING TOOLS. WEAR PROPER PROTECTIVE EQUIPMENT. STOP LEAK AND CONTAIN SPILL. ABSORB IN NON-FLAMMABLE ABSORBENT AND PLACE INTO APPROPIATE DISPOSAL CONTAINER AND SEAL. WASH AREA WITH PLENT Y OF WATER

Neutralizing Agent

NOT APPLICABLE

Waste Disposal Methods

ГОР

CONSULT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL

TOP

STORE IN COOL, DRY, WELL VENTILATED PLACE, AWAY FROM HEAT, IGNITION SOURCES AND INCOMPATIBLE MATERIALS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

Other Precautions

AVOID BREATHING VAPORS, AND EYE AND SKIN CONTACT. USEONLY WITH ADEQUATE VENTILATION. DO NOT SIPHON BY MOUTH. BOND AND GROUNDCONTAINERS DURING TRANSFER. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Fire and Explosion Hazard Information

TOF

Flash Point Method: CC

Flash Point: Flash Point Text: -45F,-43C

Autoignition Temp: Autoignition Temp Text: 830F

Lower Limits: 1.4 Upper Limits: 7.6

Extinguishing Media

USE CARBON DIOXIDE, FOAM, DRY CHEMICAL, HALON. DO NOT USE DIRECT WATER STREAM.

Fire Fighting Procedures

WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard

EXTREMELY FLAMMABLE. VAPORS CAN TRAVEL ALONG GROUND AND FLASHBACK EXPLOSIVELY. CONTAINERS MAY BURST WITH HEAT OF FIRE. COMBUSTION MAY GENERATE TOXIC GASES.

Control Measures

TOP

Respiratory Protection

NIOSH/MSHA RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE APPROPIATE FOR EXPOSURE OF CONCERN OR SCBA IF TLV IS EXCEEDED.

Ventilation

SUFFICIENT MECHANICAL (GENERAL) AND/OR LOCAL EXHAUST VENTILATION. USE EXPLOSION-PROOF EQUIPMENT.

Protective Gloves

VITON, NITRILE, PVA.

Eye Protection

SAFETY GLASSES WITH SIDE SHIELDS.

Other Protective Equipment

FULL BODY LONG-SLEEVED GARMENTS TO PREVENT REPEATED OR PROLONGED SKIN CONTACT. EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices

AVOID CONTACT WITH EYES AND SKIN. DO NOT BREATHE VAPORS. WASH THOROUGHLY AFTER HANDLING. LAUNDER CONTAMINATED CLOTHING.

Supplemental Safety and Health

THESE PRECAUTIONS ARE FOR NORMAL USES AND CONDITIONS. WHERE SPECIAL OR UNUSUAL CONDITIONS EXIST, CONSULT AN INDUSTRIAL HYGIENIST. RCRA CLASSIFICATION IGNITABLE (D001). EP TOXIC (U019).

Physical/Chemical Properties TOP HCC: F2 NRC/State LIC No: N/R Net Prop WT For Ammo: N/R **Boiling Point:** B.P. Text: 90-440F Melt/Freeze Pt: M.P/F.P Text: N/R Decomp Temp: Decomp Text: UNKNOWN Vapor Pres: 465-698 Vapor Density: 3-4 Volatile Org Content %: Spec Gravity: 0.7-0.8 VOC Pounds/Gallon: PH: N/R Viscosity: N/P VOC Grams/Liter: Evaporation Rate & UNKNOWN Reference: Solubility in Water: SLIGHT. Appearance and Odor: CLEAR LIQUID, AROMATIC ODOR, WITH DISTINCT ETHER SMELL. Percent Volatiles by Volume: 100 Corrosion Rate: UNKNOWN Seton Resource Center Allow access to non-virtual folders: 0 Reactivity Data Stability Indicator: YES Stability Condition To Avoid: HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION. Materials To Avoid: STRONG OXIDIZING AGENTS, HALOGENS. STRONG ACIDS AND ALKALIES. Hazardous Decomposition CARBON OXIDES AND VARIOUS Products: HYDROCARBONS WHEN BURNED. Hazardous Polymerization NO Indicator: Conditions To Avoid NOT APPLICABLE Polymerization: **Toxicological Information** Toxicological Information: N/P **Ecological Information** Ecological: N/P **MSDS Transport Information** Transport Information: N/P **Regulatory Information** Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P Other Information Other N/P Information: **HMIS Transportation Information** TOP Responsible Party Cage: 4K236 Trans ID NO: 115279 Product ID: GASOLINE (UNLEADED, OXYGENATED) MSDS Prepared Date: 03/11/1992 Review Date: 07/28/1993 MFN: 2 Submitter: D DG Status CD: C Article W/O MSDS: N Tech Entry NOS Shipping Nm: Radioactivity: Form: Net Explosive Weight: Coast Guard AMMO Code: Magnetism: N/P Net Unit Weight: 343.5 AF MMAC Code: LBS Limited Quantity IND: **DOD** Exemption NUM: Kit IND: N Multiple KIT Number: 0 Kit Part IND: N Review IND: Y Unit Of Issue: DR Container QTY: 55 GALLONS Type Of Container: DRUM, 18 GAGE Additional Data: REPORTABLE QUANTITY FOR BENZENE IS 10 POUNDS. **Detail DOT Information** DOT PSN Code: GTN Symbols: DOT Proper Shipping Name: GASOLINE **DOT PSN Modifier:** Hazard Class: 3 UN ID Num: UN1203 DOT Packaging Group: II Label: FLAMMABLE LIQUID Special Provision: B33,B101,T8 Packaging Exception: Non Bulk Pack: 202 Bulk Pack: 242 Max Qty 60 L Max Qty Pass: 5 L Cargo:

Detail IMO Information

IMO PSN Code: HRV

Vessel Stow Req: E

Water/Ship/Other Req:

IMO Proper Shipping Name: GASOLINE

IMO PSN Modifier:

IMDG Page Number: 3141 UN Number: 1203

UN Hazard Class: 3.1 IMO Packaging Group: II

Subsidiary Risk Label: -

EMS Number: 3-07 MED First Aid Guide NUM: 311

Detail IATA Information

IATA PSN Code: MUC IATA UN ID 1203

NUM:

IATA Proper Shipping Name: GASOLINE

IATA PSN Modifier:

IATA UN Class: 3 Subsidiary Risk Class:

IATA Label: FLAMMABLE LIQUID

UN Packing Group: II Packing Note Passenger: 305

Max Quant Pass: 5L Max Quant Cargo: 60L

Packaging Note Cargo: 307 Exceptions: A100

Detail AFI Information

TOI

AFI PSN Code: MUC AFI Symbols:

AFI Proper Shipping Name: GASOLINE

AFI PSN Modifier:

AFI Hazard Class: 3 AFI UN ID NUM: UN1203

AFI Packing Group: II

AFI Label:

Special Provisions: P5

Back Pack
Reference: A7.3

HMIS HAZCOM Label

TOP

Product ID: GASOLINE (UNLEADED, OXYGENATED)

Cage: 4K236 Assigned IND: N

Company NAVAJO REFINING COMPANY

Name:

Street: UNKNOWN PO Box: 159

City: ARTESIA State: NM Zipcode: 88211-0159

Country: US

Health Emergency Phone: 505-748-3311/800-424-9300(CHEMTREC)

Label Required IND: Y Date Of Label Review: 07/28/1993

Status Code: C MFG Label NO: N/R

Label Date: 07/28/1993 Year Procured: 1993
Origination Code: F Chronic Hazard IND: N/P

Eye Protection IND: YES Skin Protection IND: YES

Signal Word: DANGER Respiratory Protection IND: N/P

Health Hazard: Moderate

Contact Hazard: Slight
Fire Hazard: Severe
Reactivity Hazard: None

Hazard And Precautions

ACUTE: IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS. GASOLINE IF SWALLOWED, MAY BE ASPIRATED INTO LUNGS, RESULTING IN PULMONARY EDEMA AND CHEMICAL PNEUMONITIS. CHRONIC: BENZENE IS A CONFIRMED CARCINOGEN AND MAY PRODUCE BLOOD CHANGES. PROLONGE D EXPOSURE TO IGH CONCENTRATIONS HAS CAUSED KIDNEY AND LIVER CANCER IN RAT/MICE. FIRST AID: EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH WITH SOAP AND WATER. SEE DOCTOR. IN HALATION: REMOVE VICTIM TO FRSH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. GIVE 1-2 GLASSES OF WATER. SEE DOCTOR IMMEDIATELY.

DIESEL OIL/FUEL/DIESEL FUEL

NO. 2

Product and Company Identification

Composition/Information on Ingredients

Hazards Identification First Aid Measures Fire Fighting Measures

Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity Toxicological Information **Ecological Information** Disposal Considerations

Transport Information

Regulatory Information

Other Information / Hazmat Info / Hazcom

Label

MSDS Safety Information

FSC: 9140

MSDS Date: 06/27/1989 MSDS Num: BPKLX

5294

NIIN: 00-286-

Submitter: DDG

Tech Review: 11/27/1992

Status CD: C

Product DIESEL OIL/FUEL/DIESEL FUEL NO. 2

MFN: 01

Kit N

Part:

ID: Article: N

Cage: LO173

Name: ULTRAMAR INC.

Box: 93102

City: LONG BEACH

State: CA

Zip: 90809-3102

Country: US

Responsible Party

Info Phone Number: 213-491-8795 OR 213-435-5832 Emergency Phone Number: 213-491-8795 OR 213-435-5832

Preparer's Name: N/P

Proprietary Ind: N

Review Ind: Y

Published: Y

Special Project CD: N

Contractor Summary

Cage: 0NFN0

Name: TESORO PETROLEUM CORP

Address: 100 OCEANGATE ST, SUITE 515

City: LONG BEACH

State: CA

Zip: 90802-4319

Country: US

Phone: 213-436-5660

Cage: LO173

Name: ULTRAMAR INC.

Address: UNKNOWN City: LONG BEACH

State: CA

Box: 93102

Country: US

Zip: 90809-3102 Phone: 213-491-8795 OR 213-435-5832

= Item Description Information =

Item Manager: A35

Item Name: DIESEL FUEL

Specification Number: VV-F-800 Type/Grade/Class: GRADE DF-2

Unit of Issue: GL Quantitative Expression: NK
UI Container Qty: BULK Type of Container: BULK

Ingredients

TOP

Cas: 68476-34-6 Code: M RTECS #: 1004302PE Code: M

Name: DIESEL FUEL NO. 2; PETROLEUM MID-DISTILLATE

% Text: >99 Environmental Wt:

Other REC Limits: 400 PPM

OSHA PEL: 5 MG/M3 OIL MIST Code: M OSHA STEL:

ACGIH TLV: 5 MG/M3 OIL MIST Code: M ACGIH N/P STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical: N

Health Hazards Data

OP

Code:

LD50 LC50 Mixture LD50, ORAL RAT= >5 ML/KG

Route Of Entry Inds - Inhalation: YES Skin: YES Ingestion: YES

Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO

Health Hazards Acute And Chronic

EYES:IRRITATION. SKIN:SKIN IRRITANT. INHALATION:LUNG IRRITATION, CNS EFFECTS. INGESTION:PRACTICALLY NON-TOXIC TO INTERNAL ORGANS. HOWEVER, IF ASPIRATED INTO LUNGS IT MAY CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL. CHRONIC:MIDDLE DISTILLA TE HAS CAUSED KIN CANCER WHEN REPEATEDLY APPLIED TO MICE OVER LIFETIME,KIDNEY.

Explanation Of Carcinogenicity

WHOLE DIESEL ENGINE EXHAUST IS LISTED AS A PROBABLE CARCINOGEN BY IARC AND NIOSH.

Signs And Symptions Of Overexposure

SKIN:IRRITAION, DRYING EFFECT. INHALATION: HEADACHE, DIZZINESS, LOSS OF APPETITE, WEAKNESS AND LOSS OF COORDINATION.

Medical Cond Aggravated By Exposure

NONE SPECIFIED BY MANUFACTURER.

First Aid Information

TOP

EYES:FLUSH WITH FRESH WATER FOR 15 MINUTES. SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN THOROUGHLY WITH SOAP AND WATER. SEE A DOCTOR IF SYMPTOMS DEVELOP. INHALATION: REMOVE TO FRESH AIR. INGESTION: GIVE WATER OR MILK TO DRINK AND GET IMME DIATE MEDICALATTENTION. DO NOT MAKE PERSON VOMIT UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL.

Spill Release Procedures

TOP

THIS MATERIAL IS CONSIDERED TO BE A WATER POLLUTANT AND RELEASES OF THIS PRODUCT SHOULD BE PREVENTED. ELIMINATE ALL OPEN FLAMES. STOP

SOURCE OF THE LEAK. CONTAIN LIQUID. CLEAN UP SPILL USING APPROPRIATE TECHNIQUES SUCH AS ABSORBENT MATERIAL S.

Neutralizing Agent

NONE

Waste Disposal Methods TOP

PLACE CONTAMINATED MATERIALS IN DISPOSABLE CONTAINERS AND DISPOSE OF IN A MANNER CONSISTENT WITH APPLICABLE REGULATIONS. CANTACT LOCAL ENVIRONMENTAL OR HEALTH AUTHORITIES FOR APPROVED DISPOSAL OF THIS MATERIAL.

Handling and Storage Precautions

STORE IN A COOL AREA. KEEP CONTAINER LID TIGHTLY CLOSED.

Other Precautions

DO NOT INHALE VAPORS OR EXHUST FUMES, AVOID SKINCONTACT.

Fire and Explosion Hazard Information

Flash Point Method: TCC

Flash Point:

Flash Point Text: >125F,>52C

Autoignition Temp:

Autoignition Temp Text: N/K

Lower Limits: 0.6

Upper Limits: 7.5%

Extinguishing Media

USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.

Fire Fighting Procedures

WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard

COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. LIQUID EVAPORATES AND FORMS VAPORS WHICH CAN CATCH FIRE WITH VIOLENT BURNING

Control Measures

Respiratory Protection

NONE NORMALLY REQUIRED. USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS IF TLV IS EXCEEDED OR WHEN SPRAYING OR USING IN CONFINED SPACES.

Ventilation

USE THIS MATERIAL ONLY IN WELL VENTILATED AREAS.

Protective Gloves

PVC

Eye Protection

GOGGLES

Other Protective Equipment

WEAR PROTECTIVE CLOTHINGS.

Work Hygienic Practices

WASH HANDS THOROUGHLY AFTER HANDLING THIS PRODUCT.

Supplemental Safety and Health

NONE

Physical/C	nemical Properties TOP						
HCC: F4	NRC/State LIC No:						
Net Prop WT For Ammo:							
Boiling Point:	B.P. Text: 350F,177C						
Melt/Freeze Pt:	M.P/F.P Text: N/A						
Decomp Temp:	Decomp Text: UNKNOWN						
Vapor Pres: 1	Vapor Density: >1						
Volatile Org Content %:	Spec Gravity: 0.87-0.90						
VOC Pounds/Gallon:	PH: N/A						
VOC Grams/Liter:	Viscosity: 1.9 CST						
Evaporation Rate & N/K Reference:							
Solubility in Water: INSOL							
Appearance and Odor: COLORLESS TO YELLOW BROWN LIQUID, MILD PETROLEUM ODOR							
Percent Volatiles by Volume: NIL	Corrosion Rate: UNKNOWN						
Seton Resource Center Allow access to non-virtual folders	: 0 Reactivity Data TOP						
Stability Indicator: YF	ES						
Stability Condition To Avoid: HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION							
Materials To Avoid: STRONG OXIDIZING AGENTS							
Products: DI	OXIC CARBON MONOXIDE AND CARBON OXIDE, SULFUR DIOXIDE AND HYDROGEN ILFIDE.						
Hazardous Polymerization No Indicator:							
Conditions To Avoid NO Polymerization:	OT APPLICABLE						
经股份的关键的 医克里特氏	Toxicological Information TOP						
Toxicological Information: N/P							
	Ecological Information TOP						
Ecological: N/P	MODE T						
Transport Information: N/P	MSDS Transport Information TOP						
Transport Information. 19/1	Regulatory Information TOP						
	Regulatory information 10P						

Sara Title III Information: N/P Federal Regulatory Information: N/P State Regulatory Information: N/P

Other Information

Other N/P Information:

HMIS Transportation Information

TOP

Responsible Party Cage: LO173

Trans ID NO: 66800

Product ID: DIESEL OIL/FUEL/DIESEL FUEL NO. 2

MSDS Prepared Date: 06/27/1989

Review Date: 11/27/1992

MFN: 1

Submitter: D DG

Status CD: C

Article W/O MSDS: N

Tech Entry NOS Shipping Nm: PETROLEUM,

DISTILLATE.

Radioactivity:

Form:

Net Explosive Weight:

Coast Guard AMMO Code:

Magnetism: N/P

Net Unit Weight:

AF MMAC Code:

DOD Exemption NUM:

Limited Quantity IND:

Multiple KIT Number: 0

Kit IND: N

Kit Part IND: N

Review IND: Y

Unit Of Issue: GL

Container QTY: BULK

Type Of Container: BULK

Additional Data: NONE

Detail DOT Information

DOT PSN Code: GTF

Symbols:

DOT Proper Shipping Name: GAS OIL OR DIESEL FUEL OR HEATING OIL, LIGHT

DOT PSN Modifier:

Hazard Class: 3

UN ID Num: UN1202

DOT Packaging Group: III

Label: FLAMMABLE LIQUID

Special Provision: B1,T7,T30

Packaging Exception:

Non Bulk Pack: 203 Max Qty Pass: 60 L Bulk Pack: 242

Max Qty 220 L

Cargo:

Vessel Stow Req: A

Water/Ship/Other Req:

Detail IMO Information

IMO PSN Code: HRR

IMO Proper Shipping Name: GAS OIL

IMO PSN Modifier:

IMDG Page Number: 3375 UN Number: 1202

UN Hazard Class: 3.3 IMO Packaging Group: III

Subsidiary Risk Label: -

MED First Aid Guide NUM: 311 EMS Number: 3-07

Detail IATA Information

IATA UN ID 1202

NUM:

IATA Proper Shipping Name: GAS OIL

IATA PSN Code: MTX

IATA PSN Modifier:

IATA UN Class: 3 Subsidiary Risk Class:

IATA Label: FLAMMABLE LIQUID

UN Packing Group: III

Packing Note Passenger: 309

Max Quant Pass: 60L

Max Quant Cargo: 220L

Packaging Note Cargo: 310 Exceptions: A3

Detail AFI Information

AFI PSN Code: MTX **AFI Symbols:**

AFI Proper Shipping Name: GAS OIL OR DIESEL FUEL OR HEATING OIL, LIGHT

AFI PSN Modifier:

AFI Hazard Class: 3

AFI UN ID NUM: UN1202

AFI Packing Group: III

AFI Label:

Special Provisions: P5

Back Pack A7.3

Reference:

HMIS HAZCOM Label

TOP

Product ID: DIESEL OIL/FUEL/DIESEL FUEL NO. 2

Cage: LO173

Assigned IND: Y

Company ULTRAMAR INC.

Name:

Street: UNKNOWN

PO Box: 93102

City: LONG BEACH

State: CA

Zipcode: 90809-3102

Country: US

Health Emergency Phone: 213-491-8795 OR 213-435-5832

Label Required IND: Y

Date Of Label Review: 11/27/1992

Status Code: C

MFG Label NO: NONE

Label Date: 11/27/1992

Year Procured: 1992

Origination Code: F

Chronic Hazard IND: Y

Eve Protection IND: YES

Skin Protection IND: YES

Signal Word: WARNING Respiratory Protection IND: YES

Health Hazard: Slight
Contact Hazard: Slight
Fire Hazard: Moderate

Reactivity Hazard: None

Hazard And Precautions

COMBUSTIBLE LIQUID! HARMFUL OF FATAL IF SWALLOWED. CAUSES SKIN IRRITATION. PROLONGED OR REPEATED SKIN CONTACT MAY INCRESE THE RISK OF SKIN CANCER. STORE IN A COOL AREA. KEEP CONTAINER LID TIGHTLY CLOSED. FIRST AID-EYES:FLUSH WITH FRESH WATE R FOR 15 MINUTS. SKIN:REMOVE CONTAMINATED CLOTHING. WASH SKIN THOROUGHLY WITH SOAP AND WATER. SEE A DOCTOR IF SYMPTOMS DEVELOP. INHALATION: REMOVE TO FRESH AIR. INGESTION: GIVE WATER OR MILK TO DRINK AND GET IMMEDIATE MEDICAL ATTENTION. DO NOT MAKE PERSON VOMIT UNLESSDIRECTED TO DO SO BY MEDICAL PERSONNEL.

PROPANE

Product and Company Identification Physical and Chemical Properties

Composition/Information onStability and ReactivityIngredientsToxicological InformationHazards IdentificationEcological InformationFirst Aid MeasuresDisposal ConsiderationsFire Fighting MeasuresTransport Information

Accidental Release Measures Regulatory Information

Handling and Storage Other Information / Hazmat Info / Hazcom

Exposure Controls/Personal Protection Label

MSDS Safety Information

TOP

FSC: 6830 NIIN: 00-261- MSDS Date: 06/25/1990 MSDS Num: BSDDZ

7445

Submitter: D DG Tech Review: 02/03/1999 Status CD: C

Product PROPANE MFN: 01

ID:

Article: N Kit N

Part:

Responsible Party Cage: 0FB11

Name: MATHESON GAS PRODUCTS

Address: 30 SEAFIEW DRIVE

City: SEACAUCUS State: NJ Zip: 07096

Country: US

Info Phone Number: 201-867-4100/CHEMTREC 800-424-9300 Emergency Phone Number: 201-867-4100/CHEMTREC 800-424-9300

Preparer's Name: N/P

Proprietary Ind: N Review Ind: Y
Published: Y Special Project CD: N

Contractor Summary

TOP

Cage: 0FB11 Name: MATHESON GAS PRODUCTS

Address: 30 SEAFIEW DRIVE

City: SEACAUCUS State: NJ Zip: 07096

Country: US Phone: 201-867-4100, CHEMTREC 800-424-

9300

= Item Description Information =

ГОР

Item Manager: GSA

Item Name: PROPANE

Specification Number: BB-G-110 Type/Grade/Class: TYPE 2

Unit of Issue: GL Quantitative Expression: NK
UI Container Qty: BULK Type of Container: N/K

Ingredients

FOP

Cas: 74-98-6 Code: M RTECS #: TX2275000 Code: M

Name: PROPANE

% Text: 100% Environmental Wt:

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 1000 PPM

Code: M

OSHA STEL: Code:

ACGIH TLV: ASPHYXIANT; 9293

Code: M

ACGIH N/P

Code:

EPA Rpt Qty:

DOT Rpt Qty:

Ozone Depleting Chemical: N

Health Hazards Data

TOP

LD50 LC50 Mixture UNKNOWN

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Health Hazards Acute And Chronic

LIQUID MAY CAUSE FROSTIBITE, BLISTERS, BLURR VISION TO SKIN/EYES.
NARCOTIC/SIMPLE ASPHYXIANT. HIGH CONCENTRATIONS MAY CAUSE
DIZZINESS/DISORIENTATION/EXCITATION/HEADACHE/VOMITIMG/UNCONSCIOUSNESS
DUE TO ASPHYXIATION.

Explanation Of Carcinogenicity

THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.

Signs And Symptions Of Overexposure

ABOVE 100,000 PPM; SYMPTOMS OF EXPOSURE MAY INCLUDE DIZZINESS, STUPOR, AND UNCONSCIOUSNESS. ACGIH CLASSIFIES PROPANE AS AN ASPHYXIANT. FROSTBITE/BLISTERS/REDNESS/BLURRED VISION/PAIN.

Medical Cond Aggravated By Exposure

NONE KNOWN

First Aid Information

TOF

EYES:WASH W/LAG AMTS WATER FOR 15-20MIN. CALL DOCTOR. SKIN:FROSTBITE:WARM AREA W/LUKEWARM WATER OR WRAP IN BLANKETS.EXERCISE AFFECTED PART FOR CIRCULATION. INHAL:REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE CPR & OXYGEN. KEEP WARM & @ REST. CALL DOTOR. INGEST:TREAT LIPS/MOUTH/MUCOUS MEMBRANES FOR FROSTBITE. CALL DOCTOR.

Spill Release Procedures

TOP

STOP LEAK IF POSSIBLE. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. REDUCE VAPORS W/WATER SPRAY. EVACUATE ALL PERSONNEL. PROPANE IS HEAVIER THAN AIR & CAN SETTLE INTO LOW AREAS. AVOID TOUCHING GAS.

Neutralizing Agent

NOT APPLICABLE.

Waste Disposal Methods

MOVE LEAKY CYLINDER TO OUTDOORS OR VENTILATED HOOD. ALLOW GAS TO DISCHARGE AT MODERATE RATE. DISPOSE IAW FED/STATE/LOCALREGULATIONS.

Handling and Storage Precautions

TOP

DO NOT DROP CYLINDER. STORE IN CONTAINERS MEETING BONDING & GROUNDING GUIDELINES SPECIFIED IN NFPA 77-1983, RECOMMENDED PRACT ON STATIC ELECTIRICITY.

Other Precautions

STORAGE TEMPERATURE SHOULD BE KEPT BELOW 125F. CYLINDERSMUST NOT BE RECHARGED.

Fire and Explosion Hazard Information

TOP

Flash Point Method: N/P

Flash Point: =-105.C, -157.F

Flash Point Text:

Δ

Autoignition Temp Text:

Lower Limits: 9.5%

Autoignition Temp: =450.C, 842.F

Upper Limits: 2.1%

Extinguishing Media

DRY CHEMICAL, CARBON DIOXIDE, OR HALON. LG FIRES USE WATER SPRAY OR FOG.

Fire Fighting Procedures

MOVE CONTAINER FROM FIRE AREA IF POSSIBLE.COOL FIRE-EXPOSED CONTAINERS W/WATER.W/DRAW IF RISING SOUND FROM VENTING SAFETY DEVICE OR DISCOLORATION OF TANK.

Unusual Fire/Explosion Hazard

DANGEROUS FIRE/EXPLO HAZ WHEN EXPOSED TO HEAT/FLAME. VAPORS HEAVIER THAN AIR; MAY TRAVEL CONSIDERABLE DISTANCE. SEE SUPPLEMENTAL DATA.

Control Measures

TOP

Respiratory Protection

SELF-CONTAINED BREATHING APPARATUS WHERE THE CONCENTRATION OF PROPANE WOULD REDUCE OXYGEN LEVEL BELOW 18% IN INHALED AIR.

Ventilation

USE EXPLOSION PROOF VENTILATION EQUIPMENT.

Protective Gloves

INSULATED LEATHER GLOVES AS REQUIRED.

Eve Protection

SAFETY GLASSES, GOGGLES OR FACE SHIELD

Other Protective Equipment

PROTECTIVE CLOTHING FOR MINIMUM SKIN CONTACT. NONE NORMALLY REQUIRED. EYE WASH FOUNTAIN & QUICK DRENCH SHOWER.

Work Hygienic Practices

OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. USE PROPER CARE WHEN HANDLING AND STORING CYLINDERS.

Supplemental Safety and Health

LOW ELECTROCONDUCTIVITY OF PROPANE, FLOW OR AGITATION MAY GENERATE ELECTROSTATIC CHARGES RESULTING IN SPARKS W/POSSIBLE IGNITION. REFER TO CGA BULLETIN SB-2 "OXYGEN DEFICIENT ATMOSPHERES". STIMULANTS SUCH AS EPINEPHRINE MAY INDUCE VENTRICUL AR FIBRILLATIO.

Physical/Chemical Properties HCC: G2 NRC/State LIC No: N/R Net Prop WT For Ammo: N/R Boiling Point: =-42.2C, -B.P. Text: 44.F Melt/Freeze Pt: =-190.C, -M.P/F.P Text: 310.F Decomp Text: N/P Decomp Temp: Vapor Density: 1.55 Vapor Pres: 6536 Volatile Org Content %: Spec Gravity: 0.5853 @-45C VOC Pounds/Gallon: PH: N/P VOC Grams/Liter: Viscosity: N/P Evaporation Rate & UNKNOWN Reference: Solubility in Water: VERY SLIGHTTLY Appearance and Odor: COLORLESS GAS WITH A CHARACTERISTIC NATURAL GAS ODOR. Percent Volatiles by Volume: N/P Corrosion Rate: UNKNOWN Seton Resource Center Allow access to non-virtual folders: 0 Reactivity Data Stability Indicator: YES Stability Condition To Avoid: HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION. CYLINER UNDER PRESSURE-MAY EXPLODE. VAPORS MAY BE EXPLOSIVE. Materials To Avoid: BARIUM PEROXIDE, CHLORINE DIOXIDE, PLASTICS, RUBBER, COATINGS, STRONG OXIDIZING AGENTS. Hazardous Decomposition CARBON MONOXIDE, TOXIC OXIDES OF Products: CARBON. Hazardous Polymerization NO Indicator:

	Toxicological Information		TOP
Toxicological Information: N/	P		
	Ecological Information	Beatle Sales	TOP
Ecological: N/P			
	MSDS Transport Information		TOP

Conditions To Avoid NOT APPLICABLE

Polymerization:

Regulatory Information

Sara Title III Information: N/P Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

Other N/P

Information:

HMIS Transportation Information

Responsible Party Cage: 0FB11

Trans ID NO: 62225

Product ID: PROPANE

MSDS Prepared Date: 06/25/1990

Review Date: 12/14/1993

MFN: 1

Submitter: D DG

Status CD: C

Article W/O MSDS: N

Tech Entry NOS Shipping Nm:

Radioactivity:

Form:

Net Explosive Weight:

Coast Guard AMMO Code:

Magnetism: N/P

Net Unit Weight:

AF MMAC Code:

DOD Exemption NUM:

Limited Quantity IND:

Multiple KIT Number: 0

Kit IND: N

Kit Part IND: N

Review IND: Y

Unit Of Issue: GL

Container QTY: BULK

Type Of Container: N/K

Additional Data: NARCOTIC/SIMPLE ASPHYXIANT.

Detail DOT Information

DOT PSN Code: MFA

Symbols:

DOT Proper Shipping Name: PROPANE OR PROPANE MIXTURES

DOT PSN Modifier: PROPANE SEE ALSO PETROLEUM GASSES, LIQUIFIED.

Hazard Class: 2.1

UN ID Num: UN1978

DOT Packaging Group:

Label: FLAMMABLE GAS

Special Provision: 19

Packaging Exception:

Bulk Pack: 314,315

Non Bulk Pack: 304 Max Qty Pass: FORBIDDEN

Max Qty 150 KG

Cargo:

Vessel Stow Req: E

Water/Ship/Other Req: 40

Detail IMO Information

IMO PSN Code: MIR

IMO Proper Shipping Name: PROPANE

IMO PSN Modifier:

IMDG Page Number: 2147 UN Number: 1978

UN Hazard Class: 2(2.1) IMO Packaging Group: -

Subsidiary Risk Label: -

EMS Number: 2-07 MED First Aid Guide NUM: 310

Detail IATA Information

IATA PSN Code: UZT IATA UN ID 1978

NUM:

IATA Proper Shipping Name: PROPANE

IATA PSN Modifier:

IATA UN Class: 2.1 Subsidiary Risk Class:

IATA Label: FLAMMABLE GAS

UN Packing Group: Packing Note Passenger: FORB Max Quant Pass: FORB Max Quant Cargo: 150KG

Packaging Note Cargo: 200 Exceptions: A1

Detail AFI Information

AFI PSN Code: UZT **AFI Symbols:**

AFI Proper Shipping Name: PROPANE OR PROPANE MIXTURES; SEE ALSO PETROLEUM

GASES, LIOUEFIED

AFI PSN Modifier:

AFI Hazard Class: 2.1 AFI UN ID NUM: UN1978

AFI Packing Group: N/A

AFI Label:

Back Pack A6.3, A6.7 Special Provisions: P4

HMIS HAZCOM Label

Product ID: PROPANE

Cage: 0FB11 Assigned IND: N

Company MATHESON GAS PRODUCTS

Name:

Street: 30 SEAFIEW DRIVE PO Box:

City: SEACAUCUS State: NJ Zipcode: 07096

Country: US

Health Emergency Phone: 201-867-4100/CHEMTREC 800-424-9300

Label Required IND: Y Date Of Label Review: 12/14/1993

Status Code: C MFG Label NO:

Label Date: 12/14/1993 Year Procured: N/K

Origination Code: F Chronic Hazard IND: N/P Eye Protection IND: YES Skin Protection IND: YES

Signal Word: DANGER Respiratory Protection IND: YES

Health Hazard: Slight
Contact Hazard: Moderate
Fire Hazard: Severe
Reactivity Hazard: None

Hazard And Precautions

LIQ MAY CAUSE FROSTIBITE/BLISTERS/BLURR VISION TO SKIN/EYES. HIGH CONCEN MAY CAUSE

DIZZINESS/DISORIENTATION/EXCITATION/HEADACHE/VOMITIMG/UNCONSCIOUSNESS DUE TO ASPHYXIATION. 1STAID:EYES:WASH W/LG AMTS WATER FOR 15-20MIN. CALL DOCTOR.SKIN:FR OSTBITE:WARM AEA W/LUKEWARM WATER OR WRAP IN BLANKETS.EXERCISE AREA FOR CIRCULATION.INHAL:REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR/OXYG. KEEP WARM & @ REST. CALL DR.INGEST:TREAT LIPS/MOUTH/MUCOUS MEMBRANES FOR FROSTBITE. CALL DR. TA RGET ORGANS:CNS/SKIN/EYE. DONT DROP CYLINDER. STORE IN CONTAINERS MEETING BONDING/GROUNDING GUIDELINES IAW NFPA 77-1983, RECOMM PRACT ON STATIC ELECTRICITY.

AUTOMATIC TRANSMISSION **FLUID**

Product and Company Identification

Composition/Information on Ingredients

Hazards Identification First Aid Measures Fire Fighting Measures Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity Toxicological Information **Ecological Information** Disposal Considerations Transport Information Regulatory Information

Other Information / Hazmat Info / Hazcom

Label

MSDS Safety Information

TOP

FSC: 9150

NIIN: 01-353-

MSDS Date: 04/30/1996 MSDS Num: CDKRD

4799

Submitter: DDG

Tech Review: 03/26/1997

Status CD: C

Product AUTOMATIC TRANSMISSION FLUID

MFN: 01

Article: N

Kit N

Part:

Responsible Party

Cage: NO483

Name: INTERNATIONAL PETROLEUM COMPANY

Address: 210 SECOND STREET

Box: 262

City: ST. MARYS

State: WV

Zip: 26170

Country: US

Info Phone Number: 304-684-3733 (8-5 MON-FRI)

Emergency Phone Number: 304-684-3140 OR 304-684-3733 (8-5)

Preparer's Name: UNKNOWN

Proprietary Ind: Y

Review Ind: Y

Published: Y Special Project CD: N

Contractor Summary

Cage: NO483

Name: INTERNATIONAL PETROLEUM COMPANY

Address: 210 SECOND STREET

Box: 262

City: ST. MARYS

State: WV

Zip: 26170

Country: US

Phone: 304-684-3733 (8-5 MON-FRI)

Cage: 0A1G5

Name: PITT PENN OIL CO

= Item Description Information =

Address: 426 FREEPORT RD

Box: 296

City: CREIGHTON

State: PA

Zip: 15030-0296

Country: US

Phone: 724-226-2712

Item Manager: S9G

Item Name: HYDRAULIC FLUID, AUTOMATIC TRANSMISSION

Specification Number: NONE

Unit of Issue: QT

Type/Grade/Class: NONE

Quantitative Expression: NK

UI Container Qty: 1 QUART Type of Container: CONTAINER

Ingredients

Cas: Code: RTECS #: Code:

Name: *** PROPRIETARY HMIS ***

Environmental Wt:

Other REC Limits:

OSHA PEL: OSHA STEL: OSHA STEL:

ACGIH TLV: Code: ACGIH STEL: Code:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: RTECS #: Code:

Name:

Environmental Wt:

Other REC Limits:

OSHA PEL: Code: OSHA STEL: Code:

ACGIH TLV: Code: ACGIH STEL: Code:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Health Hazards Data

LD50 LC50 Mixture NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: NO Skin: NO Ingestion: NO

Health Hazards Acute And Chronic

ACUTE: NOT EXPECTED TO PRESENT A SIGNIFIGANT HEALTH HAZARD UPON SHORT-TERM EXPOSURE. CHRONIC: PROLONGED OR REPEATED CONTACT WITH THIS MATERIAL MAY PRODUCE SKIN IRRITATION AND INFLAMMATION.

Explanation Of Carcinogenicity

NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Signs And Symptions Of Overexposure

SKIN-IRRITATION, INFLAMMATION.

Medical Cond Aggravated By Exposure

PERSONS WITH PRE-EXISTING SKIN DISORDERS SHOULD AVOID CONTACT.

First Aid Information

TOF

TOP

INHALED-REMOVE TO FRESH AIR IF OVEREXPOSED. EYES-FLUSH WITH WATER FOR 15 MINUTES, LIFT LIDS. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS. SKIN-REMOVE BY WIPING THEN WASH WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHES. DISCARD CONTAMINATED LEATHER GLOVES& SHOES.

Spill Release Procedures

ГОР

CONTAIN SPILL; PREVENT FROM ENTERING WATER BODIES. SAFELY STOP FLOW. EVACUATE NON-ESSENTIAL PERSONNEL. CLEAN-UP AS SOON AS POSSIBLE. ABSORB WITH INERT MATERIAL & PLACE IN A CONTAINER FOR DISPOSAL.

Neutralizing Agent

NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods

TOP

MAXIMIZE PRODUCT RECOVERY OR RECYCLING. CONDITIONS OF USE MAY CAUSE MATERIAL TO BECOME A "HAZARDOUS WASTE". DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.

Handling and Storage Precautions

ГОР

AVOID WATER CONTAIMINATION TO AVOID PRODUCT DEGRADATION. MINMUM FEASIBLE HANDLING TEMPERATURES SHOULD BE MAINTAINED.

Other Precautions

PERSIODS OF EXPOSURE TO TEMPERATURES >200F SHOULD BEMINIMIZED.
PRODUCT DEGRADATION MIGHT INCREASE HEALTH HAZARD RISKS. IFSPILLED:
MAY REQUIRE NOTIFICATION OF NATIONAL RESPONSE CENTER AT800-424-8802.

Fire and Explosion Hazard Information

TOP

Flash Point Method: COC

Flash Point:

Flash Point Text: 380F,193C

Autoignition Temp:

Autoignition Temp Text: N/P

Lower Limits: N/P

Upper Limits: N/P

Extinguishing Media

CARBON DIOXIDE, DRY CHEMICAL. WATER FOG & FOAM ARE EFFECTIVE BUT MAY CAUSE FROTHING.

Fire Fighting Procedures

WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL FIRE FIGHTER'S PROTECTIVE GEAR. USE WATER TO COOL FIRE EXPOSED CONTAINERS.

Unusual Fire/Explosion Hazard

SLIGHTLY COMBUSTIBLE; NFPA CLASS III. WHEN HEATD ABOVE FLASH POINT, WILL RELEASE FLAMMABLE VAPORS WHICH BURN IN THE OPEN; EXPLODE IN CONFINED SPACES.

Control Measures

TOP

Respiratory Protection

NONE NORMALLY REQUIRED. IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED

RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IAW 29 CFR 1910.134.

Ventilation

USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves

IMPERVIOUS-NITRILE.

Eye Protection

SAFETY GLASSES/CHEMICAL SPLASH GOGGLES.

Other Protective Equipment

DLA-HMIS: EYE WASH STATION & SAFETY SHOWER.

Work Hygienic Practices

WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

MSDS PRESENTED BY CAGE 0A1G5 FOR CONTRACT NUMBER SP0450-97-MM879.

Physical/Chemical Properties

OP

HCC: V6

NRC/State LIC No: N/R

Net Prop WT For Ammo: N/R

Boiling Point:

B.P. Text: >675F,>357C

Melt/Freeze Pt:

M.P/F.P Text: UNKNOWN

Decomp Temp:

Decomp Text: UNKNOWN

Vapor Pres: <0.1

Vapor Density: >10

Volatile Org Content %:

Spec Gravity: 0.87

VOC Pounds/Gallon:

PH: N/K

VOC Grams/Liter:

Viscosity: UNKNOWN

Evaporation Rate & UNKNOWN

Reference:

Solubility in Water: NEGLIGIBLE

Appearance and Odor: RED-COLORED LIQUID; LUBE OIL ODOR.

Percent Volatiles by Volume: N/K

Corrosion Rate: UNKNOWN

Seton Resource Center

Allow access to non-virtual folders: 0

Reactivity Data

TOP

Stability Indicator: YES

Stability Condition To Avoid: KEEP AWAY FROM HEAT & OPEN FLAME.

Materials To Avoid: NONE SPECIFIED BY MANUFACTURER. DLA-

HMIS: STRONG OXIDIZING AGENTS.

Hazardous Decomposition NONE SPECIFIED BY MANUFACTURER,

Products:

Hazardous Polymerization N/P

Indicator:

Conditions To Avoid NONE SPECIFIED BY MANUFACTURER. Polymerization:

Polymerization:	oxicological Information TO	P
Toxicological Information: N/P	OACOUGICAL INIO MALION	1
	Ecological Information TO	P
Ecological: N/P		
Ms	SDS Transport Information TO	P
Transport Information: N/P		
THE REAL PROPERTY AND ASSESSMENT AND ASSESSMENT OF THE PARTY OF THE PA	Regulatory Information TO	P
Sara Title III Information: N/P		
Federal Regulatory Information: N/P		
State Regulatory Information: N/P		
	Other Information TO	P
Other N/P Information:		
	Transportation Information TO	P
Responsible Party Cage: NO483	Trans ID NO: 128465	
SARO NE VICENZA DISABILITADO	IC TRANSMISSION FLUID	
MSDS Prepared Date: 04/30/1996	Review Date: 03/26/1997	
MFN: 1		
Submitter: D DG	Status CD: C	
Article W/O MSDS: N	Tech Entry NOS Shipping Nm:	
Radioactivity: N/R	Form:	
Net Explosive Weight: N/R		
Coast Guard AMMO Code: N/R	Magnetism: N/P	
Net Unit Weight: 1.8 LBS	AF MMAC Code:	
DOD Exemption NUM: N/R	Limited Quantity IND:	
Multiple KIT Number: 0	Kit IND: N	
Kit Part IND: N	Review IND: Y	
Unit Of Issue: QT	Container QTY: 1 QUART	
Type Of Container: CONTAINE	R	
Additional Data:		
	Detail DOT Information TO	P
DOT PSN Code: ZZZ	Symbols: N/R	

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

DOT PSN Modifier:

Hazard Class: N/R UN ID Num: N/R

DOT Packaging Group: N/R

Label: N/R

Special Provision: N/R Packaging Exception: N/R

Non Bulk Pack: N/R

Max Qty Pass: N/R

Max Qty N/R

Cargo:

Vessel Stow Req: N/R Water/Ship/Other Req: N/R

Detail IMO Information

TOP

IMO PSN Code: ZZZ

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

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 MED First Aid Guide NUM; N/R

Detail IATA Information

TOP

IATA PSN Code: ZZZ

IATA UN ID N/R NUM:

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF

TRANSPORTATION

IATA PSN Modifier:

IATA UN Class: N/R Subsidiary Risk Class: N/R

IATA Label: N/R

UN Packing Group: N/R

Max Quant Pass: N/R

Packaging Note Passenger: N/R

Max Quant Cargo: N/R

Exceptions: N/R

Detail AFI Information

TOP

AFI PSN Code: ZZZ

AFI Symbols:

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

AFI PSN Modifier:

AFI Hazard Class: N/R AFI UN ID NUM: N/R

AFI Packing Group: N/R

AFI Label: N/R

Special Provisions: N/A

Back Pack
Reference:

HMIS HAZCOM Label

TOP

Product ID: AUTOMATIC TRANSMISSION FLUID

Cage: NO483 Assigned IND: Y

Company INTERNATIONAL PETROLEUM COMPANY

Name:

Street: 210 SECOND STREET PO Box: 262

The state

City: ST. MARYS State: WV Zipcode: 26170

Country: US

Health Emergency Phone: 412-226-2712

Label Required IND: N Date Of Label Review: 03/26/1997

Status Code: C MFG Label NO:

Label Date: 03/26/1997

Origination Code: N

Chronic Hazard IND: N/P

Eye Protection IND: N/P

Skin Protection IND: N/P

Signal Word: CAUTION Respiratory Protection IND: N/P

Health Hazard: None
Contact Hazard: None
Fire Hazard: Slight
Reactivity Hazard: None

Hazard And Precautions

N/P

HYDRAULIC OIL 1192

Product and Company Identification Physical and Chemical Properties

Composition/Information on Stability and Reactivity

IngredientsToxicological InformationHazards IdentificationEcological InformationFirst Aid MeasuresDisposal ConsiderationsFire Fighting MeasuresTransport Information

Accidental Release Measures Regulatory Information

Handling and Storage Other Information / Hazmat Info / Hazcom

Exposure Controls/Personal Protection Label

MSDS Safety Information TOR

FSC: 9150 NIIN: 01-169- MSDS Date: 11/12/1991 MSDS Num: BGPQL

2789

Submitter: D DG Tech Review: 12/31/1994 Status CD: C

Product HYDRAULIC OIL 1192 MFN: 01

ID:

Article: N Kit N

Part:

Responsible Party Cage: 73277

Name: HOUGHTON INTL INC

Address: MADISON AND VAN BUREN AVE Box: 930

City: VALLEY FORGE State: PA Zip: 19482-0930

Country: US

Info Phone Number: 215-666-4000

Emergency Phone Number: 215-666-4105, CHEMTREC 800-424-9300

Preparer's Name: ROBERT E. WILLIAMS

Proprietary Ind: N Review Ind: Y

Published: Y Special Project CD: N

Contractor Summary TOP

Cage: 73277 Name: HOUGHTON INTERNATIONAL INC

Box: 930

City: VALLEY FORGE State: PA Zip: 19482

Country: US Phone: 610-666-4105

= Item Description Information = TOP

Item Manager: S9G

Item Name: HYDRAULIC OIL

Specification Number: NONE Type/Grade/Class: NONE

Unit of Issue: DR Quantitative Expression: 00000000055GL
UI Container Qty: 54 GALLONS Type of Container: 1A1 STEEL

Ingredients TOP

Cas: 64741-88-4 Code: M RTECS #: PY8040501 Code: M

Name: MINERAL OIL, SOLVENT REVFINED HEAVY PARAFFINIC, SEVERELY HYDROTREATED (NON-CARCINOGENIC - IARC)

% Text; >60.0 Environmental Wt:

Other REC Limits: N/R

OSHA PEL: NOT ESTABLISHED Code: M OSHA STEL: Code:

ACGIH TLV: NOT ESTABLISHED Code: M ACGIH N/P Code: STEL:

EPA Rpt Qty: DOT Rpt
Qty:

Ozone Depleting Chemical: N

Cas: 64742-52-5 Code: M RTECS #: PY8035001 Code: M

Name: MINERAL OIL, HYDROTREATED (SEVERE), HEAVY NAPHTHENIC

DISTILLATE

% Text: UNKNOWN Environmental Wt:

Other REC Limits: NONE RECOMMENDED

STEL:

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

ACGIH TLV: 5 MG/M3 (OIL MIST) Code: M ACGIH N/P Code:

STEL:
EPA Rpt Qty:
DOT Rpt

Qty:

Ozone Depleting Chemical: N

Health Hazards Data

TOF

LD50 LC50 Mixture LD50 (ORAL RAT) IS UNKNOWN

Route Of Entry Inds - Inhalation: YES Skin: YES Ingestion: YES

Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO

Health Hazards Acute And Chronic

INHALED:AVOID BREATHING PRODUCT MISTS. BREATHING MISTS IN EXCESS OF THE TLV MAY CAUSE IRRITATION OF UPPER RESPIRATORY TRACT. SKIN:MAY BE A MILD IRRITANT ON PROLONGED CONTACT. EYE:MILD IRRITANT. INGESTED:NO SIGNIFICANT EFFECTS KNOWN.

Explanation Of Carcinogenicity

MANUFACTURER GAVE NO COMMENTS OTHER THAN THE ABOVE REFERENCES TO THE THREE LISTINGS.

Signs And Symptions Of Overexposure

EYES:MILD IRRITATION. SKIN:MILD IRRITATION ON PROLONG CONTACT. INHALATION:IRRITATION OF RESPIRATORY TRACT. INGESTION: NO SIGNIFICANT EFFECTS ARE KNOWN.

Medical Cond Aggravated By Exposure

PERSONS W/CHRONIC RESPIRATORY DISEASE MAY SHOW INCREASED SYMPTOMS DUE TO IRRITATION.

First Aid Information

ГОР

EYE:FLUSH WITH WATER FOR 15 MINUTES, CONSULT PHYSICIAN. SKIN:WASH WITH
SOAP AND WATER. INHALED:REMOVE TO SOURCE OF FRESH AIR. INGESTED:DO NOT
INDUCE VOMITING; CONSULT PHYSICIAN. PRODUCT IS MAINLY MINERAL OIL.

Spill Release Procedures

OP

APPLY DRY ABSORBENT MATERIAL & SWEEP UP.

Neutralizing Agent

MFR GAVE NO INFORMATION ON MSDS.

Waste Disposal Methods

TOP

NOT CONSIDERED A POLLUTANT. EFFECTIVE WASTE DISPOSAL METHODS SHOULD BE UTILIZED. KEEP OUT OF SEWERS & STREAMS. FOLLOW REGULATIONS FOR DISPOSAL OF WASTE PETROLEUM OIL. MAY E INCINERATED UNDER CONTROLLED CONDITIONS.

Handling and Storage Precautions

TOP

AVOID CONTACT W/STRONG OXIDIZERS.

Other Precautions

NONE

Fire and Explosion Hazard Information

OP

Flash Point Method: COC

Flash Point: Flash Point Text: 360F,182C

Autoignition Temp: Autoignition Temp Text: N/A

Lower Limits: N/D Upper Limits: N/D

Extinguishing Media

CARBON DIOXIDE, FOAM, DRY CHEMICAL.

Fire Fighting Procedures

NONE - TREAT AS AN OIL FIRE.

Unusual Fire/Explosion Hazard

NONE

Control Measures

TOP

Respiratory Protection

REQUIRED ONLY IF TLV IS EXCEEDED.

Ventilation

MECHANICAL (GENERAL) VENTILATION. IF MISTING OCCURS, USE EXHAUST TYPE.

Protective Gloves

RUBBER OR IMPERVIOUS FOR SENSITIVE SKIN

Eye Protection

SAFETY GOGGLES IF SPLASHING

Other Protective Equipment

Work Hygienic Practices

MFR: ? HMIS:USE GOOD INDUSTRIAL HYGIENE PRACTICE, AVOID UNNECESSARY EXPOSURE. WASH THOROUGHLY BEFORE EATING OR DRINKING

Supplemental Safety and Health

NONE Physical/Chemical Properties TOP HCC: V6 NRC/State LIC No: NONE Net Prop WT For Ammo: NONE **Boiling Point:** B.P. Text: HIGH.WIDE. M.P/F.P Text: UNKNOWN Melt/Freeze Pt: Decomp Text: UNKNOWN Decomp Temp: Vapor Pres: NIL Vapor Density: >10 Volatile Org Content %: Spec Gravity: 0.88 VOC Pounds/Gallon: PH: N/A VOC Grams/Liter: Viscosity: N/P **Evaporation Rate & VERY LOW** Reference: Solubility in Water: EMULSIFIES Appearance and Odor: AMBER FLUID, BLAND ODOR Percent Volatiles by Volume: NIL Corrosion Rate: UNKNOWN Seton Resource Center Allow access to non-virtual folders: 0 Reactivity Data Stability Indicator: YES

101

Stability Condition To Avoid: MFR GAVE NO INFORMATION ON MSDS.

Materials To Avoid: STRONG OXIDIZERS

Hazardous Decomposition OXIDES OF CARBON, TRACE OXIDES OF

Products: SULFUR.

Hazardous Polymerization NO

Indicator:

Conditions To Avoid WILL NOT OCCUR.

Polymerization:

Toxicological Information

Toxicological Information: N/P

Ecological Information

TOR

Ecological: N/P

Transport Information: N/P

MSDS Transport Information

Regulatory Information

TOP

Sara Title III Information: N/P

Federal Regulatory Information: N/P State Regulatory Information: N/P

Other Information

TOF

Other N/P Information:

HMIS Transportation Information

TOP

Responsible Party Cage: 73277 Trans ID NO: 112736

Product ID: HYDRAULIC OIL 1192

MSDS Prepared Date: 11/12/1991 Review Date: 12/31/1994

MFN: 1

Submitter: D DG Status CD: C

Article W/O MSDS: N Tech Entry NOS Shipping Nm:

Radioactivity: Form:

Net Explosive Weight:

Coast Guard AMMO Code: Magnetism: N/P

Net Unit Weight: 403.0 AF MMAC Code:

LBS

DOD Exemption NUM: Limited Quantity IND:

Multiple KIT Number: 0 Kit IND: N

Kit Part IND: N Review IND: Y

Unit Of Issue: DR Container QTY: 54

GALLONS

Type Of Container: 1A1 STEEL

Additional Data:

Detail DOT Information

ТО

DOT PSN Code: ZZZ Symbols: N/R

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

DOT PSN Modifier:

Hazard Class: N/R UN ID Num: N/R

DOT Packaging Group: N/R

Label: N/R

Special Provision: N/R

Packaging Exception: N/R

Non Bulk Pack: N/R

Max Qty Pass: N/R

Max Qty N/R

Cargo:

Vessel Stow Req: N/R

Water/Ship/Other Req: N/R

Detail IMO Information

TOP

IMO PSN Code: ZZZ

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

IMO PSN Modifier:

IMDG Page Number: N/R UN Number: N/R

IMO Packaging Group: N/R UN Hazard Class: N/R

Subsidiary Risk Label: N/R

EMS Number: N/R MED First Aid Guide NUM: N/R

Detail IATA Information

IATA PSN Code: ZZZ IATA UN ID N/R

NUM:

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF

TRANSPORTATION

IATA PSN Modifier:

IATA UN Class: N/R Subsidiary Risk Class: N/R

IATA Label: N/R

UN Packing Group: N/R Packing Note Passenger: N/R Max Quant Pass: N/R Max Quant Cargo: N/R Packaging Note Cargo: N/R Exceptions: N/R

Detail AFI Information

AFI PSN Code: ZZZ **AFI Symbols:**

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

AFI PSN Modifier:

AFI Hazard Class: N/R AFI UN ID NUM: N/R

AFI Packing Group: N/R

AFI Label: N/R

Back Pack Reference: N/A Special Provisions: N/A

HMIS HAZCOM Label

Product ID: HYDRAULIC OIL 1192

Cage: 73277 Assigned IND: N Company HOUGHTON INTERNATIONAL INC

Name:

Street: PO Box: 930

City: VALLEY FORGE Zipcode: 19482 State: PA

Country: US

Health Emergency Phone: 215-666-4105, CHEMTREC 800-424-9300

Label Required IND: Y Date Of Label Review: 12/31/1994

Status Code: C MFG Label NO: NONE Label Date: 12/31/1994 Year Procured: 1995 Origination Code: F Chronic Hazard IND: N/P Eye Protection IND: YES Skin Protection IND: YES Respiratory Protection IND: YES Signal Word: CAUTION

Health Hazard: Slight Contact Hazard: Slight Fire Hazard: Slight Reactivity Hazard: None

Hazard And Precautions

TARGET ORGANS:RESPIRATORY SYSTEM, SKIN INHALED:AVOID BREATHING PRODUCT MISTS. BREATHING MISTS IN EXCESS OF THE TLV MAY CAUSE IRRITATION OF UPPER RESPIRATORY TRACT. SKIN:MAY BE A MILD IRRITANT ON PROLONGED CONTACT. EYE:MILD IRRITANT. IN GESTED:NO SIGNFICANT EFFECTS KNOWN. AVOID CONTACT W/STRONG OXIDIZERS. IN CASE OF SPILL: APPLY DRY ABSORBENT MATERIAL & SWEEP UP.

BATTERY ACID

Product and Company Identification Physical and Chemical Properties

Composition/Information on Stability and Reactivity Ingredients Toxicological Information Hazards Identification **Ecological Information** First Aid Measures Disposal Considerations

Fire Fighting Measures Transport Information Accidental Release Measures Regulatory Information

Handling and Storage Other Information / Hazmat Info / Hazcom

Exposure Controls/Personal Protection Label

MSDS Safety Information

TOP

MSDS Date: 09/18/1993 MSDS Num: CCPHD FSC: 6140

Submitter: NEN LIIN: 00N073789 Tech Review: 10/16/1996 Status CD: C Product BATTERY ACID MFN: 01

ID:

Article: N Kit N

Cage: 25244

Part:

Name: JOHNSON CONTROLS BATTERY GROUP INC

Box: 591

City: MILWAUKEE State: WI Zip: 53201

Country: US

Responsible Party

Info Phone Number: 414-228-3138

Emergency Phone Number: 414-228-3138;800-424-9300(CHEMTREC)

Preparer's Name: N/P

Proprietary Ind: N Review Ind: N

Published: Y Special Project CD: N

Contractor Summary

Name: JOHNSON CONTROLS INC GLOBE BATTERY DIV Cage: 25244 Address: 5757 N GREEN BAY AVE Box: 591

City: MILWAUKEE State: WI Zip: 53201

> Country: US Phone: 414-228-2746/800-424-9300(CHEMTREC)

Ingredients

Cas: 7664-93-9 Code: M RTECS #: WS5600000 Code: M

Name: SULFURIC ACID (SARA 302/313) (CERCLA)

% Text: 35 Environmental Wt:

Other REC Limits: N/K

OSHA PEL: 1 MG/M3 OSHA Code: M Code:

ACGIHTLV: 1 MG/M3/3 STEL Code: M ACGIH N/P STEL:

Code:

EPA Rpt Qty: 1000 LBS

DOT Rpt 1000 LBS

Qty:

Ozone Depleting Chemical: N

Cas:

Code: X

RTECS #: 9999999ZZ Code: M

Name: SUPDAT: TEETH, CAUSE DERM, CHRONIC IRRIT OF EYES, MOUTH, & STOM, & CHRONIC INFLAMM OF NOSE, THROAT & BRONCH

TUBES.(ING 3)

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE

Code: M

OSHA STEL:

Code:

ACGIH TLV: NOT APPLICABLE

Code: M

ACGIH N/P STEL:

Code:

EPA Rpt Qty:

DOT Rpt Qty:

Ozone Depleting Chemical:

Cas:

Code: X

RTECS #: 9999999ZZ Code: M

Name: ING 2:THE IARC HAS CLASSIFIED "STRONG INORG ACID MIST

CONTAINING SULFURIC ACID" AS CATEGORY 1 CARCIN, SUBSTANCE

(ING 4)

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE

Code: M

OSHA STEL:

Code:

ACGIH TLV: NOT APPLICABLE

Code: M

ACGIH N/P STEL:

Code:

EPA Rpt Qty:

DOT Rpt Qty:

Ozone Depleting Chemical:

Cas:

Code: X

RTECS #: 9999999ZZ Code: M

Name: ING 3:THAT IS CARCIN TO HUMANS. THIS CLASSIFICATION DOES NOT APPLY TO LIQ FORMS OF SULFURIC ACID/SULFURIC ACID (ING 5)

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE

Code; M

OSHA STEL: Code:

ACGIH TLV: NOT APPLICABLE

Code: M

ACGIH N/P

Code:

EPA Rpt Qty:

STEL: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: ING 4:SOLNS. INORG ACID MIST (SULFURIC ACID MIST) IS NOT GENERATED UNDER NORM USE OF PROD. MISUSE OF PROD, (ING 6)

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE Code: M OSHA STEL: Code:

ACGIH TLV: NOT APPLICABLE Code: M ACGIH N/P Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: ING 5:SUCH AS OVERHEATING, MAY HOWEVER RESULT IN THE

GENERATION OF SULFURIC ACID MIST.

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE Code: M OSHA STEL:

ACGIH TLV: NOT APPLICABLE Code: M ACGIH N/P Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: FIRST AID PROC: VOMIT. SEE PHYS IMMED. DO NOT GIVE ANYTHING

BY MOUTH TO UNCONSCIOUS PERSON.

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE Code: M OSHA

STEL:

ACGIH TLV: NOT APPLICABLE Code: M ACGIH N/P Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Code:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: SPILL RELEASE PROC:PLACE IN DRUM/OTHER SUITABLE CNTNR.

DISPOSE AS HAZ WASTE. WEAR ACID RESIST BOOTS, FACESHIELD,

(ING 9)

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA OSHA PEL: NOT APPLICABLE Code: M Code: STEL: ACGIH N/P

ACGIHTLV: NOT APPLICABLE Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: ING 8: CHEMICAL SPLASH GOGGLES, AND ACID RESISTANT GLOVES.

DO NOT RELEASE UNNEUTRALIZED ACID!

% Text: N/K **Environmental Wt:**

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA Code: M Code: STEL:

ACGIH N/P ACGIH TLV: NOT APPLICABLE Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: OTHER PREC:FOR LEAD/ACID BATTERIES AND/OR ACID CNTNRS.

SUCH STOR AREAS SHOULD BE EQUIPPED W/DRAIN WHICH

CAPTURES(ING 11)

% Text: N/K **Environmental Wt:**

Other REC Limits: N/K

OSHA OSHA PEL: NOT APPLICABLE Code: M Code: STEL:

ACGIH N/P ACGIHTLV: NOT APPLICABLE Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Code: X RTECS #: 9999999ZZ Code: M Cas:

Name: ING 10:SPILLS OF ACID SO THAT THEY MAY BE NEUTRALIZED, COLLECTED, AND DISPOSED OF PROPERLY. WEAR REC EYE PROT.

(ING 12)

% Text: N/K **Environmental Wt:**

Other REC Limits: N/K

OSHA OSHA PEL: NOT APPLICABLE Code: M Code: STEL:

ACGIH N/P ACGIH TLV: NOT APPLICABLE Code: M Code: STEL:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: ING 11:IF CLTHG BECOMES SATURATED W/ACID, REMOVE AND WASH AFFECTED AREA W/WATER FOR 15 MINS. DISCARD SATURATED

CLOTHING.

ACGIH TLV: NOT APPLICABLE

% Text: N/K **Environmental Wt:**

Other REC Limits: N/K

Code:

OSHA PEL: NOT APPLICABLE OSHA Code: M Code: STEL: ACGIH N/P Code: M

STEL: EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: EYE PROT: & FULL LENGTH FACESHIELD (FP N).

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA Code: M Code: STEL:

ACGIH N/P ACGIH TLV: NOT APPLICABLE Code: M Code: STEL:

DOT Rpt EPA Rpt Qty: Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: OTHER PROT EQUIP: ACID RESIST APRON. USE SFTY SHOES

W/RUBB/NEOPRENE BOOTS OR STEEL-TOED RUBB/NEOPRENE BOOTS

WORN (ING 15)

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE **OSHA** Code: M Code: STEL:

ACGIH TLV: NOT APPLICABLE ACGIH N/P Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: X RTECS #: 9999999ZZ Code: M

Name: ING 14: OVER SOCKS. PLACE PANTS LEGS OVER BOOTS TO KEEP ACID OUT OF BOOTS. ALL FOOTWEAR MUST MEET REQUIREMENTS (ING 16)

% Text: N/K Environmental Wt:

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA

Code: M STEL:

ACGIH N/P ACGIHTLV: NOT APPLICABLE Code: M STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Code: X RTECS #: 9999999ZZ Code: M Cas:

Name: ING 15:OF ANSI Z41.4 REV. 1972.

Environmental Wt: % Text: N/K

Other REC Limits: N/K

OSHA PEL: NOT APPLICABLE OSHA Code: M Code: STEL:

ACGIH N/P ACGIH TLV: NOT APPLICABLE Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Health Hazards Data

Code:

Code:

LD50 LC50 Mixture NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: YES Skin: YES **Ingestion: YES**

Carcinogenicity Inds - NTP: YES IARC: NO OSHA: NO

Health Hazards Acute And Chronic

ACUTE: INHAL: BATTERY ELECTROLYTE (ACID) MAY BE INHALED AS MIST GENERATED DURING FORMATION/CHARGING OF LEAD/ACID BATTERIES/IF IT IS SPILLED IN CONFINED AREA. SKIN:BATTERY ELECTROLYTE (ACID) MAY CAUSE IRRITATIVE CONT DERM. EYE:BATTERY ELECTROL YTE (ACID) WIL IRRITATE. EXPOSURE TO HIGH CONCS OF BATTERY (EFTS OF OVEREXP)

Explanation Of Carcinogenicity

SULFURIC ACID: IARC MONOGRAPHS ON EVAL OF CARCIN RISK OF CHEMS TO MAN, VOL 54, PG 41, 1992:GROUP 1. HUMAN:PULM IRRIT.

Signs And Symptions Of Overexposure

HLTH HAZ:ELECTROLYTE (ACID) MIST CAUSES SEV IRRIT OF EYES, RESP TRACT, & SKIN. IT MAY ALSO CAUSE TEETH EROSION, MOUTH SORENESS/BRTHG DFCLTS. CONT W/BATTERY ELECTROLYTE (ACID) MAY IRRITATE SKIN & MUC MEMB & MAY CAUSE IRREPARABLE CORNEAL DMG & BLINDNESS AS ELL AS FACIAL SCARRING WHICH CAN INCL EYELIDS. CHRONIC: (SUPDAT)

Medical Cond Aggravated By Exposure

CONT OF BATTERY ELECTROLYTE (ACID) WITH SKIN & EYES MAY AGGRAVATE CHRONIC SKIN & EYE DISEASES. INHALATION OF MIST MAY AGGRAVATE CHRONIC DISEASES OF THE RESPIRATORY TRACT AND STOMACH.

INHAL:REMOVE FROM EXPOS & CONSULT PHYS IF ANY OF ACUTE EFTS LISTED DEVELOP. SKIN: WASH THORO W/SOAP & WATER. IF ACID IS SPLASHED ON CLTHG, IMMED REMOVE THEM & DISCARD, IF ACID IS SPLASHED IN SHOES, REMOVE THEM IMMED & DISCARD. ACID CANNOT BE REMOVED FROMLEATHER. EYES:HOLD EYELIDS OPEN & IMMED RINSE W/COOL, RUNNING WATER FOR @ LST 15 MINS. SEEK MED ATTN AFTER RINSING. INGEST: DO NOT INDUCE (ING 7)

Spill Release Procedures

VENTILATE AREA, REMOVE COMBUST MATLS & ALL SOURCES OF IGNIT, CNTN SPILL BY DIKING W/SODA ASH (SODIUM CARBONATE) OR LIME (CALCIUM OXIDE). COVER SPILL W/EITHER CHEM. MIX WELL. MAKE CERTAIN MIX IS NEUT (CHECK W/PH PAPER). COLLECT RESIDUE AND (ING 8)

Neutralizing Agent

NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods

NEUTRALIZE AS ABOVE FOR SPILL, COLLECT RESIDUE, & PLACE IN DRUM OR SUITABLE CNTNR. DISPOSE OF AS HAZ WASTE. DO NOT FLUSH LEAD CONTAMD ACID TO A SEWER. DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS (FP N).

Handling and Storage Precautions

STORE CYTNRS IN COOL, DRY PLACE, & PROTECT THEM FROM DMG. DO NOT STACK ACID CNTNRS MORE THAN 4 (FOUR) HIGH.

Other Precautions

TO DILUTE CONCENTRATED ACID, ADD ACID TO WATER (NOTWATER TO ACID). WATER CAN BE ADDED TO DILUTE BATTERY ACID IN SM OTYS W/OUTDANGER OF VIOLENT RXN. AN EYEWASH FOUNTAIN & SFTY SHOWER SHOULD BE LOCATEDIN/NEAR STOR AREA(S) USED (ING 10)

Fire and Explosion Hazard Information

Flash Point Method: N/P

Flash Point:

Flash Point Text: NONE

Autoignition Temp:

Autoignition Temp Text: N/A

Lower Limits: NONE

Upper Limits: NONE

Extinguishing Media

USE DRY CHEMICAL, FOAM, OR CARBON DIOXIDE (CO*2).

Fire Fighting Procedures

USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N). AVOID USE OF WATER WHERE THERE IS DANGER OF ACID SPREADING.

Unusual Fire/Explosion Hazard

CHARGING & FORMING BATTERIES MAY GENERATE HYDROGEN GAS WHICH IS FLAMM & EXPLO, THEY ALSO GENERATE OXYG WHICH SUPPORTS COMBUST, THEREFORE, KEEP SPKS & (SUPDAT)

Respiratory Protection

NONE REQUIRED UNDER NORMAL HANDLING CONDITIONS. IF ACID SPILLAGE OCCURS IN CONFINED SPACE, A NIOSH APPRVD RESPIRATOR SUITABLE FOR PROTECTION AGAINST ACID MIST MAY BE REQUIRED.

Ventilation

USE GEN DILUTION VENT TO MAINTAIN CONCS OF SULFURIC ACID MIST BELOW OSHA PEL OF 1 MG/M3 WHEN FORMING/CHARGING BATTERIES.

Protective Gloves

GAUNTLET TYPE GLOVES.

Eye Protection

ANSI APPRVD CHEM WORKERS GOGGS (ING 13)

Other Protective Equipment

ANSI APPRVD EYE WASH & DELUGE SHOWER (FP N). LONG SLEEVED SHIRT & TROUSERS MADE OF SYNTHETIC MATL. IMPERMEABLE, (ING 14)

Work Hygienic Practices

REMOVE SPLASHES OF ACID IMMED FROM SKIN W/LG AMTS OF COOL, RUNNING WATER FOLLOWED BY WASHING W/SOAP & WATER.

Supplemental Safety and Health

EXPLO HAZ:OTHER SOURCES OF IGNIT AWAY. HYDROGEN MAY ALSO BE GENERATED BY ACTION OF ACID ON ORG MATLS, NITRATES, CARBIDES, & MOST METALS. MATLS TO AVOID:NITRATES, PICRATES, & FULMINATES. EFTS OF OVEREXP:RPTD/PRLNGD EXPOS TO BATTERY ELECTROLY TE (ACID) MAY AUSE SKIN IRRIT. RPTD/PRLNGD EXPOS TO MIST MAY ERODE (ING 2)

Physical/Chemical Properties

TOP

HCC: NRC/State LIC No:

Net Prop WT For Ammo:

Boiling Point: B.P. Text: 230F,110C
Melt/Freeze Pt: M.P/F.P Text: -79.6F,-62C

Decomp Temp: Decomp Text: N/K

Vapor Pres: 11.7 Vapor Density: 3.4
Volatile Org Content %: Spec Gravity: 1.265

VOC Pounds/Gallon: PH: N/K

Evaporation Rate & NOT KNOWN

Reference:

Solubility in Water: 100%

VOC Grams/Liter:

Appearance and Odor: COLORLESS TO CLOUDY LIQUID WITH SLIGHT

Viscosity: N/P

ACIDIC ODOR.

Percent Volatiles by Volume: N/K

Corrosion Rate: N/K

Seton Resource Center

Stability Condition To Avoid: PREVENT SMOKING, FIRES, AND ANY OTHER SOURCE OF IGNITION AROUND LEAD/ACID BATTERIES. Materials To Avoid: COMBUST MATLS (ESPECIALLY FINELY DIVIDED), STRONG REDUCING AGENTS, MOST METALS, CARBIDES, ORG MATLS, CHLORATES, (SUPDAT) Hazardous Decomposition HYDROGEN, SULFUR DIOXIDE, SULFUR Products: TRIOXIDE. Hazardous Polymerization NO Indicator: Conditions To Avoid NOT RELEVANT. Polymerization: Toxicological Information Toxicological Information: N/P **Ecological Information** Ecological: N/P MSDS Transport Information Transport Information: N/P Regulatory Information Sara Title III Information: N/P Federal Regulatory Information: N/P State Regulatory Information: N/P Other Information Other N/P Information: **HMIS HAZCOM Label** Product ID: BATTERY ACID Cage: 25244 Assigned IND: N Company JOHNSON CONTROLS INC GLOBE BATTERY DIV Name: PO Box: 591 Street: 5757 N GREEN BAY AVE City: MILWAUKEE State: WI Zipcode: 53201 Country: US Health Emergency Phone: 414-228-3138;800-424-9300(CHEMTREC) Label Required IND: Y Date Of Label Review: 10/16/1996 Status Code: C MFG Label NO: Label Date: 10/16/1996 Year Procured: N/K Origination Code: G Chronic Hazard IND: Y Eye Protection IND: YES Skin Protection IND: YES Signal Word: DANGER Respiratory Protection IND: YES

Reactivity Data

Stability Indicator: YES

Health Hazard: Severe Contact Hazard: Severe Fire Hazard: Slight Reactivity Hazard: Slight

Hazard And Precautions

CORROSIVE. ACUTE:INHAL:BATTERY ELECTROLYTE (ACID) MAY BE INHALED AS MIST GENERATED DURING FORMATION/CHARGING OF LEAD/ACID BATTERIES/IF IT IS SPILLED IN CONFINED AREA. SKIN:BATTERY ELECTROLYTE (ACID) MAY CAUSE IRRITATIVE CONT DERM. EYE:BATTE RY ELECTROLYTE(ACID) WILL IRRITATE. EXPOSURE TO HIGH CONCS OF BATTERY ACID MIST CAUSES SEV IRRIT OF EYES, RESP TRACT & SKIN. ACID CONT MAY IRRITATE SKIN & MUC MEMB & MAY CAUSE IRREPARABLE CORNEAL DMG & BLINDNESS. CHRONIC:CANCER HAZARD. SUL FURIC ACID IS LISTED AS HUMANPULMONARY CARCINOGEN (FP N). RPTD MIST EXPOS MAY ERODE TEETH, CAUSE DERMATITIS, AND CAUSE INFLAMMATION OF NOSE, THROAT & BRONCHIAL TUBES.

403648, QUAKER STATE HD MOTOR OIL (30)

Product and Company Identification Composition/Information on Ingredients

Hazards Identification
First Aid Measures
Fire Fighting Measures
Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity
Toxicological Information
Ecological Information
Disposal Considerations
Transport Information
Regulatory Information

Other Information / Hazmat

Info / Hazcom Label

MSDS Safety Information TOP

FSC: 9150 MSDS Date: 07/01/1990 MSDS Num: BPLGD

Submitter: N EN LIIN: 00N031318 Tech Review: 07/19/1995 Status CD: C Product 403648, QUAKER STATE HD MOTOR OIL (30) MFN: 01

ID:

Article: N Kit N

Part:

Responsible Party Cage: FO677

Name: QUAKER STATE CORP

Box: 989

City: OIL CITY State: PA Zip: 16301

Country: US

Info Phone Number: 814-676-7676 Emergency Phone Number: 814-676-7676

Preparer's Name: N/P

Proprietary Ind: Y Review Ind: N
Published: Y Special Project CD: N

Contractor Summary TO

Cage: 77493 Name: QUAKER STATE CORPORATION

Address: 255 E JOHN CARPENTER FREEWAY

City: IRVING State: TX Zip: 75062

Country: US Phone: 800-562-5928

Cage: FO677 Name: QUAKER STATE CORPORATION

Address: N/K
City: OIL CITY
State: PA
Zip: 16301

Country: NK Phone: (814) 676-7676

Ingredients TOP

Cas: Code: RTECS #: Code:

Name: *** PROPRIETARY HMIS ***

Environmental Wt:

Other REC Limits:

OSHA PEL: Code: OSHA Code: STEL:

ACGIH TLV: Code: ACGIH Code: STEL:

EPA Rpt Qty: DOT Rpt

Qty:

Ozone Depleting Chemical:

Cas: Code: RTECS #: Code:

Name:

Environmental Wt:

Other REC Limits:

OSHA PEL: OSHA STEL: Code:

ACGIH TLV: Code: ACGIH

STEL:
EPA Rpt Qty:

DOT Rpt

Qty:

Ozone Depleting Chemical:

Health Hazards Data

TOP

Code:

LD50 LC50 Mixture NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: NO Skin: NO Ingestion: NO Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO

Health Hazards Acute And Chronic

ACUTE:INGEST: NOT EXPECTED TO BE ACUTELY TOXIC, MAY CAUSE NAUSEA & DIARRHEA. SKIN ABSORPTION: NO DATA AVAILABLE. INHAL: NOT EXPECTED TO BE TOX BY INHAL. HOWEVER, BREATHING MINERAL OIL MISTS @ LEVELS ABOVE TLV MAY CAUSE RESPIRATORY IRRITATIO N & POSSIBLE DSCOMFORT. CREATION OF AN OIL MIST IS UNLIKELY (EFTS OF OVEREXP)

Explanation Of Carcinogenicity

NOT RELEVANT

Signs And Symptions Of Overexposure

HLTH HAZ: WHEN USED AS A MOTOR OIL. SKIN: MATERIAL EXPECTED TO CAUSE NO MORE THAN MINOR IRRIT FOLLOWING PROLONGED &/ OR REPEATED CONTACT. EYE: MAY CAUSE MINOR IRRITATION. CHRONIC: NONE KNOWN. SEE NOTES TO PHYS.

Medical Cond Aggravated By Exposure

NONE SPECIFIED BY MANUFACTURER.

First Aid Information

OP

INGEST: DO NOT INDUCE VOMIT & CONT PHYS. SKIN: WASH THORO W/SOAP & H2O. LAUNDER SOILED CLTHG. INHAL: MOVE TO FRESH AIR. CONT PHYS IF

DISCOMFORT/IRRIT CONTINUES. EYES: FLUSH W/H2O FOR @ LST 15 MIN. IF IRRIT OCCURS, CONT PHYS. NOTES TO PHYS: USED MOTOR OIL HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN MICE FOLLOWING RPTD APPLICATN & CONTINUOUS EXPOS. BRIEF/INTERMITTENT SKIN CONT W/USED (SUPP DATA)

Spill Release Procedures

TOP

CLEAN UP SPILLS AS SOON AS POSSIBLE. ABSORB LARGE SPILLS WITH COMMERCIALLY AVAILABLE ABSORBENT MATERIALS, SUCH AS ABSORBENT CLAY.

Neutralizing Agent

NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods

TOP

PLACE CONTAMINATED MATERIAL IN DISPOSABLE CONTAINERS AND BURY IN AN APPROVED LANDFILL SITE PER LOCAL, STATE AND FEDERAL REGULATIONS.

Handling and Storage Precautions

ГОР

DO NOT STORE NEAR HIGH HEAT OR OPEN FLAMES.

Other Precautions

AVOID PRLNG/FREQUENTLY RPTD SKIN CONT W/MATL. SKIN CONTCAN BE MINIMIZED BY WEARING IMPERVIOUS PROT GLOVES. AS W/ALL PROD OFNATURE, GOOD PERSONAL HYGIENE IS ESSENTIAL. HANDS & OTHER EXPOS AREASSHOULD BE WASH THORO W/SOAP/H2O (SUPP DATA)

Fire and Explosion Hazard Information

TOP

Flash Point Method: COC

Flash Point:

Flash Point Text: >400F,>204C

Autoignition Temp:

Autoignition Temp Text: N/A

Lower Limits: N/K

Upper Limits: N/K

Extinguishing Media

CO2, DRY CHEM, FOAM, H2O FOG. H2O MAY BE INEFTIVE IN FIGHTING AN OIL FIRE UNLESS USED BY EXPERIENCED FIRE FIGHTERS.

Fire Fighting Procedures

WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT (FP N).

Unusual Fire/Explosion Hazard

CONTAINERS MAY BURST WHEN EXPOSED TO FIRE CONDITIONS.

Control Measures

ГОР

Respiratory Protection

NOT APPLICABLE FOR INTENDED USE. HOWEVER, IF UNUSUAL OPERATING CONDITIONS CREATE CONCENTRATIONS IN EXCESS OF TLV, AN NIOSH/MSHA APPROVED RESPIRATOR IS RECOMMENDED.

Ventilation

NONE NEEDED FOR INTENDED USE. SPECIAL VENT IS NEC ONLY IF UNUSUAL OPERATING CONDITIONS CREATE CONC IN EXCESS OF TLV.

Protective Gloves

IMPERVIOUS GLOVES.

Eye Protection

CHEM WORK GOG & FULL LENGTH FSHLD(FP N).

Other Protective Equipment

NONE NORMALLY NEC FOR INTENDED USE. REGULAR LAUNDER OF CONTAMD CLTHG IS ESSENTIAL TO REDUCE INDIRECT SKIN CONT W/MATL.

Work Hygienic Practices

HANDS & OTHER EXPOSED AREAS SHOULD BE WASHED THORO W/SOAP & H2O AFTER CONT, ESP BEFORE EATING &/OR SMOKING.

Supplemental Safety and Health

FIRST AID PROC:MOTOR OIL IS NOT EXPECTED TO HAVE SERIOUS EFTS IN HUMANS IF OIL IS THORO REMOVED BY WASHING W/SOAP/H2O. IT IS BELIEVED DURING USE IN INTERNAL COMBUST ENGINES CONTAM OF OIL W/LOW LEVELS OF CANCER CAUSING COMBUST PROD (POLY NUC LEAR AROMATICS OCCURS. OTHER PREC: AFTER CONT, ESP BEFORE EATING &/OR (ING 4)

Physical/Chemical Properties

TOP

HCC: V6

NRC/State LIC No:

Net Prop WT For Ammo:

Boiling Point:

Melt/Freeze Pt:

M.P/F.P Text: N/K

Decomp Temp:

Decomp Text: N/K

Vapor Pres: N/K Vapor Density: N/K

Volatile Org Content %: Spec Gravity: 0.87(H2O=1)

VOC Pounds/Gallon:

PH: N/K

VOC Grams/Liter:

Viscosity: N/P

Evaporation Rate & N/K

Reference:

Solubility in Water: NIL

Appearance and Odor: DARK LIQUID (THICKNESS DEPENDENT ON

VISCOSITY). SLIGHT HYDROCARBON ODOR.

Percent Volatiles by Volume: NIL Corrosion Rate: N/K

Seton Resource Center

Allow access to non-virtual folders: 0

Reactivity Data

TOP

Stability Indicator: YES

Stability Condition To Avoid: HIGH TEMPERATURES AND OPEN FLAMES.

Materials To Avoid: STRONG OXIDIZING AGENTS.

Hazardous Decomposition CO, H2O VAP. MAY PRODUCE OXIDES OF

Products: SULPHUR, NITROGEN AND PHOSPHORUS.

INCOMPLETE COMBUSTION CAN PRODUCE

CO.

Hazardous Polymerization NO

Indicator:

Conditions To Avoid NOT RELEVANT Polymerization:

	Polymerization:		
	经产的。	Toxicological Information	TOP
Toxic	cological Information: N/P		
	建设在,在2000年度联系	Ecological Information	TOP
	Ecological: N/P		
		SDS Transport Information	TOP
Tran	sport Information: N/P		or the second second second
	Sara Title III Information: N/P	Regulatory Information	TOP
Fodo	eral Regulatory Information: N/P		
St	ate Regulatory Information: N/P	Other Information	TOP
•	Other N/P	Other information	TOP
Inf	formation:		
	HMU	S Transportation Information	TOP
R	esponsible Party Cage: FO677	Trans ID NO: 36021	N. SECTION OF SECTION
	Product ID: 403648, QU	JAKER STATE HD MOTOR OIL (30)	
	MSDS Prepared Date: 07/01/1990	THE STATE OF	
	MFN: 1		
	Submitter: N TN	Status CD: C	
	Article W/O MSDS: N	Tech Entry NOS Shipping Nm:	
	Radioactivity:	Form:	
	Net Explosive Weight:		
Coas	t Guard AMMO Code:	Magnetism: N/P	
	Net Unit Weight:	AF MMAC Code:	
	DOD Exemption NUM:	Limited Quantity IND:	
	Multiple KIT Number: 0	Kit IND: N	
	Kit Part IND: N	Review IND: Y	
	Unit Of Issue: NK	Container QTY: NK	
	Type Of Container:	2227772	
		JLATED FOR TRANSPORTATION	
		Detail DOT Information	TOP
	DOT PSN Code: ZZZ	Symbols: N/R	AUI.
DOT	Proper Shipping Name: NOT REG	ULATED BY THIS MODE OF TRANSPORTATION	
	DOT PSN Modifier:		
	Hazard Class: N/R	UN ID Num: N/R	
I	OOT Packaging Group: N/R		
	Label: N/R		

Special Provision: N/R Packaging Exception: N/R

Non Bulk Pack: N/R

Max Qty Pass: N/R

Max Qty N/R

Cargo:

Vessel Stow Req: N/R Water/Ship/Other Req: N/R

Detail IMO Information

TOP

IMO PSN Code: ZZZ

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

IMO PSN Modifier:

IMDG Page Number: N/R
UN Hazard Class: N/R
IMO Packaging Group: N/R

Subsidiary Risk Label: N/R

EMS Number: N/R MED First Aid Guide NUM: N/R

Detail IATA Information

TOP

IATA PSN Code: ZZZ

IATA UN ID N/R

NUM:

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF

TRANSPORTATION

IATA PSN Modifier:

IATA UN Class: N/R Subsidiary Risk Class: N/R

IATA Label: N/R

UN Packing Group: N/R

Max Quant Pass: N/R

Packaging Note Cargo: N/R

Packaging Note Cargo: N/R

Exceptions: N/R

Detail AFI Information

TOP

AFI PSN Code: ZZZ

AFI Symbols:

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

AFI PSN Modifier:

AFI Hazard Class: N/R AFI UN ID NUM: N/R

AFI Packing Group: N/R AFI Label: N/R

Special Provisions: N/A Back Pack Reference: N/A

HMIS HAZCOM Label

TOP

Product ID: 403648, QUAKER STATE HD MOTOR OIL (30)

Cage: FO677 Assigned IND: Y

Company QUAKER STATE CORPORATION

Name:

Street: N/K PO Box: 989

City: OIL CITY State: PA Zipcode: 16301

Country: NK

Health Emergency Phone: 814-676-7676

Label Required IND: Y Date Of Label Review: 06/05/1992

Status Code: C MFG Label NO:

Label Date: 06/05/1992 Year Procured: N/K

Origination Code: G Chronic Hazard IND: Y

Eye Protection IND: YES Skin Protection IND: YES

Signal Word: CAUTION Respiratory Protection IND: YES

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: Slight

Reactivity Hazard: None

Hazard And Precautions

DO NOT STORE NEAR HIGH HEAT OR OPEN FLAMES. ACUTE: INGEST: MAY CAUSE NAUSEA AND DIARRHEA. INHAL: BREATHING MINERAL OIL MISTS @ LEVELS ABOVE TLV MAY CAUSE RESPIRATORY IRRITATION AND POSSIBLE DISCOMFORT. SKIN: MINOR IRRITATION FOLLOWING PROLO NGED AND/OR REEATED CONTACT. EYE: MAY CAUSE MINOR IRRITATION. CHRONIC: USED MOTOR OILS HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN MICE FOLLOWING REPEATED APPLICATION AND CONTINUOUS EXPOSURE.

ANTIFREEZE ETHYLENE GLYCOL (BULK,839E)

Product and Company Identification
Composition/Information on Ingredients

Hazards Identification
First Aid Measures
Fire Fighting Measures

Accidental Release Measures

Handling and Storage

Exposure Controls/Personal Protection

Physical and Chemical Properties

Stability and Reactivity
Toxicological Information
Ecological Information
Disposal Considerations
Transport Information
Regulatory Information
Other Information / Hazmat

Info / Hazcom Label

MSDS Safety Information TO

FSC: 6850 NIIN: 00-135- MSDS Date: 12/21/1988 MSDS Num: BGVQC

2878

Submitter: D DG Tech Review: 05/04/1989 Status CD: C

Product ANTIFREEZE ETHYLENE GLYCOL (BULK,839E) MFN: 01

ID:

Article: N Kit N

Part:

Responsible Party Cage: 71954

Name: DOW CHEMICAL U.S.A.

Address: 2020 DOW CENTER

City: MIDLAND State: MI Zip: 48674

Country: NK

Info Phone Number: 517-636-4410 Emergency Phone Number: 517-636-4400

Preparer's Name: N/P

Proprietary Ind: N Review Ind: Y

Published: Y Special Project CD: N

Contractor Summary

Cage: 71983 Name: DOW CHEMICAL U S A

Address: 2030 DOW CENTER BARSTOW BLDG

City: MIDLAND State: MI Zip: 48640

Country: US Phone: 517-636-4400

Cage: 71954 Name: DOW CHEMICAL U.S.A.

Address: 2020 DOW CENTER Box: N/K
City: MIDLAND State: MI Zip: 48674

Country: NK Phone: (517) 636-4400

= Item Description Information = TOP

Item Manager: S9G

Item Name: ANTIFREEZE

Specification Number: NONE Type/Grade/Class: NK

Unit of Issue: DR Quantitative Expression: 00000000055GL UI Container Oty: 55 GAL Type of Container: STD COML DRUM

Ingredients

TOP

Cas: 107-21-1 Code: M RTECS #: KW2975000 Code: M

Name: ETHYLENE GLYCOL (SARA III)

Environmental Wt: % Text: >90

Other REC Limits: N/P

OSHA PEL: C 50 PPM OSHA Code: Code: M STEL:

ACGIH N/P ACGIH TLV: C 50 PPM, VAPOR; Code: M Code: STEL: 9192

DOT Rpt 1 LB EPA Rpt Qty: 1 LB Qty:

Ozone Depleting Chemical: N

Cas: 111-46-6 Code: M RTECS #: ID5950000 Code: M

Name: DIETHYLENE GLYCOL

% Text: <5 **Environmental Wt:**

Other REC Limits: N/P

OSHA OSHA PEL: N/K Code: M Code: STEL:

ACGIH N/P ACGIH TLV: N/K Code: M Code: STEL:

DOT Rpt EPA Rpt Qty: Qty:

Ozone Depleting Chemical: N

Cas: Code: X RTECS #: 1000602IN Code: M

Name: INHIBITORS

% Text: >2 **Environmental Wt:**

Other REC Limits: N/P

OSHA OSHA PEL: N/K Code: M Code: STEL:

ACGIH N/P ACGIH TLV: N/K Code: M Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical:

Cas: 7732-18-5 RTECS #: ZC0110000 Code: M Code: M

Name: WATER

% Text: <3 Environmental Wt:

Other REC Limits: N/P

STEL:

OSHA

OSHA PEL: N/R Code: M Code: STEL: ACGIH TLV: N/R ACGIH N/P Code: Code: M

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical: N

Health Hazards Data

TOP

LD50 LC50 Mixture SINGLE DOSE ORAL LD50 NOT DETERMINED

Route Of Entry Inds - Inhalation: YES Skin: YES Ingestion: YES Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO

Health Hazards Acute And Chronic

EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT. OBSERVATIONS IN ANIMALS INCLUDE FORMATION OF BLADDER STONES AFTER REPEATED ORAL DOSES OF DIETHYLENE GLYCOL. OBSERVATIONS IN ANIMALS INCLUDE KIDNEY AND LIVER EFFECTS AND DEP OSITION OF CALIUM SALTS IN TISSUES AFTER DIETARY INTAKE OF ETHYLENE GLYCOL.

Explanation Of Carcinogenicity

NONE OF THE COMPOUNDS IN THIS CHEMICAL IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Signs And Symptions Of Overexposure

EYE:MAY CAUSE TEMPORARY IRRITATION, SKIN: NONIRRITATING, REPEATED EXPOSURE MAY RESULT IN ABSORPTION OF HARMFUL AMOUNTS. INGESTION: MODERATELY TOXIC. EXCESSIVE AMOUNTS MAY CAUSE CNS EFFECTS, CARDIO-PULMONARY EFFECTS & KIDNEY FAILURE. INHALAT ION: HEATED VAORS MAY CAUSE IRRITATION & OTHER EFFECTS.

Medical Cond Aggravated By Exposure

NONE.

First Aid Information

INHALATION: REMOVE TO FRESH AIR, IF NOT BREATHING GIVE CPR, CALL A PHYSICIAN. SKIN: WASH SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. EYE: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. ING ESTION: INDUC VOMITING. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER TO DRINK. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. CALL A PHYSICIAN.

Spill Release Procedures

SMALL SPILL: ABSORB ON SAND OR OTHER NON-COMBUSTIBLE ABSORBANT, PLACE IN DISPOSAL CONTAINER, LARGE SPILL: EVACUATE AREA. VENTILATE AREA. ELIMINATE IGNITION SOURCES. DIKE TO RETAIN SPILL. PICK UP FREE LIQUID WITH PUMP OR VACUUM. ABSORB RESID UE.

Neutralizing Agent

NONE RECOMMENDED.

Waste Disposal Methods

TOP

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND LAWS. INCINERATION RECOMMENDED.

Handling and Storage Precautions

OP

STORE IN COOL, DRY AREA. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. PROTECT FROM PHYSICAL DAMAGE.

Other Precautions

AVOID BREATHING SPRAY MISTS IF GENERATED.

Fire and Explosion Hazard Information

TOF

Flash Point Method: SCC

Flash Point: Flash Point Text: >247F,>119C

Autoignition Temp: Autoignition Temp Text: 775F

Lower Limits: N/K Upper Limits: N/K

Extinguishing Media

CARBON DIOXIDE, ALCOHOL FOAM, DRY CHEMICAL, WATER FOG.

Fire Fighting Procedures

EVACUATE AREA, WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND SCBA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard

NONE EXPECTED UNDER NORMAL STORAGE AND HANDLING CONDITIONS; HOWEVER, ENGINE COMPONENTS CAN BE AT TEMPERATURES ABOVE THE FLASH, FIRE AND AUTOIGNITION POINT.

Control Measures

TOP

Respiratory Protection

SELECT NIOSH/MSHA APPROVED RESPIRATOR BASED UPON CONTAMINATION LEVELS FOUND IN THE WORK PLACE.

Ventilation

LOCAL AND MECHANICAL (GENERAL) VENTILATION AS REQUIRED TO MAINTAIN VAPOR AND MIST CONCENTRATIONS BELOW PELS EST. BY OSHA

Protective Gloves

RUBBER (IMPERVIOUS).

Eye Protection

SAFETY GLASSES OR SAFETY GOGGLES.

Other Protective Equipment

EYE WASH STATION, CLEAN BODY-COVERING CLOTHING.

Work Hygienic Practices

WASH THOROUGHLY AFTER USE AND BEFORE EATING, DRINKING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

NSN 6850-00-181-7940 IS A RELATED PRODUCT. SEE MSDS UNDER THAT NSN FOR

Physical/Chemical	l Properties	TOP		
HCC: N1	NRC/State LIC No:			
Net Prop WT For Ammo:				
Boiling Point:	B.P. Text: 330F, 166C			
Melt/Freeze Pt:	M.P/F.P Text: N/K			
Decomp Temp:	Decomp Text: N/K			
Vapor Pres: VERY LOW	Vapor Density: >1			
Volatile Org Content %:	Spec Gravity: 1.11 TO 1.14			
VOC Pounds/Gallon:	PH: N/K			
VOC Grams/Liter:	Viscosity: N/K			
Evaporation Rate & (BUTYL ACE) Reference:	TATE=1)			
Solubility in Water: COMPLETE				
Appearance and Odor: LIQUID,COLO				
Percent Volatiles by Volume: N/K	Corrosion Rate: N/K			
Seton Resource Center				
Allow access to non-virtual folders: 0				
	activity Data		TOP	
Stability Indicator: YES	AT ETHYLENE CLYCOL WILL			
	N AIR AT 775F. DIETHYLENE WILL IGNITE IN AIR AT 435F.			
Materials To Avoid: OXIDIZI	NG MATERIAL.			
Hazardous Decomposition DURING COMBUSTION, CARBON MONOXIDE, Products: CARBON DIOXIDE AND UNIDENTIFIED TOXIC FUMES AND/OR VAPORS.				
Hazardous Polymerization NO Indicator:				
Conditions To Avoid N/R Polymerization:				
	cological Information		TOP	
Toxicological Information: N/P			000000000000000000000000000000000000000	
	logical Information		TOP	
Ecological: N/P		Control of the State of the Sta	TOD	
Transport Information: N/P	Transport Information		TOP	
	ulatory Information	《 公司》,	TOP	
Sara Title III Information: N/P	mator y morniadon	AND STREET, ST	101	
Federal Regulatory Information: N/P				
State Regulatory Information: N/P				
	ther Information		TOP	

HMIS Transportation Information

Responsible Party Cage: 71954 Trans ID NO: 49576

Product ID: ANTIFREEZE ETHYLENE GLYCOL (BULK,839E)

MSDS Prepared Date: 12/21/1988 Review Date: 05/03/1989

MFN: 1

Submitter: D DG Status CD: C

Article W/O MSDS: N Tech Entry NOS Shipping Nm:

Radioactivity: Form:

Net Explosive Weight:

Coast Guard AMMO Code: Magnetism: N/P

Net Unit Weight: 513 AF MMAC Code;

LBS

DOD Exemption NUM: Limited Quantity IND:

Multiple KIT Number: 0 Kit IND: N

Kit Part IND: N Review IND: Y

Unit Of Issue: DR Container QTY: 55 GAL

Type Of Container: STD COML DRUM

Additional Data:

Detail DOT Information

TO

DOT PSN Code: ZZZ Symbols: N/R

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

DOT PSN Modifier:

Hazard Class: N/R UN ID Num: N/R

DOT Packaging Group: N/R

Label: N/R

Special Provision: N/R

Packaging Exception: N/R

Non Bulk Pack: N/R Bulk Pack: N/R

Max Qty Pass: N/R Max Qty N/R Cargo:

Vessel Stow Req: N/R

Water/Ship/Other Req: N/R

Detail IMO Information

TOP

IMO PSN Code: ZZZ

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

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 MED First Aid Guide NUM: N/R

Detail IATA Information

IATA PSN Code: ZZZ IATA UN ID N/R

NUM:

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF

TRANSPORTATION

IATA PSN Modifier:

IATA UN Class: N/R Subsidiary Risk Class: N/R

IATA Label: N/R

UN Packing Group: N/R

Max Quant Pass: N/R

Max Quant Cargo: N/R

Packaging Note Cargo: N/R Exceptions: N/R

Detail AFI Information

TOP

AFI PSN Code: ZZZ AFI Symbols:

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

AFI PSN Modifier:

AFI Hazard Class: N/R AFI UN ID NUM: N/R

AFI Packing Group: N/R

AFI Label: N/R

Special Provisions: N/A

Back Pack
Reference: N/A

HMIS HAZCOM Label

TOP

Product ID: ANTIFREEZE ETHYLENE GLYCOL (BULK,839E)

Cage: 71954 Assigned IND: N

Company DOW CHEMICAL U.S.A.

Name:

Street: 2020 DOW CENTER PO Box: N/K
City: MIDLAND State: MI Zipcode: 48674

Country: NK

Health Emergency Phone: 517-636-4400

Label Required IND: Y Date Of Label Review: 12/16/1998

Status Code: C MFG Label NO:

Label Date: 12/16/1998 Year Procured: N/K
Origination Code: G Chronic Hazard IND: N/P
Eye Protection IND: N/P Skin Protection IND: N/P

Signal Word: N/P Respiratory Protection IND: N/P

Health Hazard: Contact Hazard: Fire Hazard:

Reactivity Hazard:

Hazard And Precautions

EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT. OBSERVATIONS IN ANIMALS INCLUDE FORMATION OF BLADDER STONES AFTER REPEATED ORAL DOSES OF DIETHYLENE GLYCOL. OBSERVATIONS IN ANIMALS INCLUDE KIDNEY AND LIVER EFFECTS AND DEP OSITION OF CALIUM SALTS IN TISSUES AFTER DIETARY INTAKE OF ETHYLENE GLYCOL. EYE:MAY CAUSE TEMPORARY IRRITATION. SKIN: NONIRRITATING. REPEATED EXPOSURE MAY RESULT IN ABSORPTION OF HARMFUL AMOUNTS. INGESTION: MODERATELY TOXIC. EXCESSIVE A MOUNTS MAY CAUSE CNS EFFECTS, CARDIO-PULMONARY EFFECTS & KIDNEY FAILURE. INHALATION: HEATED VAPORS MAY CAUSE IRRITATION & OTHER EFFECTS.