

FIRE DEPARTMENT

DATE:

April 10, 2018

TO:

CHIEF RICK POESCHL

ASSISTANT CHIEF JIM EDEN

FROM

CAPTAIN MIKE WEISSENBACH AND

SUBJECT:

HAZARDOUS MATERIAL PERMIT APPLICATION

KC DUMPSTER, 1280 SE CENTURY DR.

I have received a Hazardous Material Permit Application submitted by Rody Taylor with KC Dumpster Co. 1280 SE Century Dr. Lee's Summit Missouri, 64081. The new owner wants to install a 250 gallon waste oil storage tank, and 110 gallons of motor oil in 55 gallon drums. There will also be a 3000 gallon diesel fuel tank/dispenser. All of the oil, and fuel will be used for the maintenance of their fleet vehicles and heating appliances. There will be no resale of the oil and fuel to the public.

The permit application contained information for waste engine oil, diesel fuel, new engine oil and acetylene tank. The individual total quantities of these materials is in excess of the thresholds set forth in the Emergency Planning and Community Right-to-Know Act of 1986 (SARA TITLE III, EPCRA) of the 10,000 lb. for hazardous materials and 500 lb. for extremely hazardous materials and is addressed in ORDINANCE NO. 7370 of the Lee's Summit Code of Ordinances and a Hazardous Material Permit is required. The threshold quantities (TPQ) set forth in EPCRA, is required to obtain a Hazardous Materials Permit.

I recommend approval of the application based on the following stipulations:

- (1) All appurtenances need to be UL listed for their intended use.
- (2) NFPA 704 placard signage to be placed on the storage tanks and building. Placards shall indicate the SDS hazard rating of the contents.
- (3) Vehicle impact guards installed around the fuel vessels.
- (4) Safeguards for overflow protection / emergency shut-off devices.
- (5) Emergency shutoffs shall be no more than 100 feet and not less than 20 feet. (IFC 2012 2303.2)

Attachment

MAW



Lee's Summit, Missouri Fire Department

Hazardous Material Permit Application

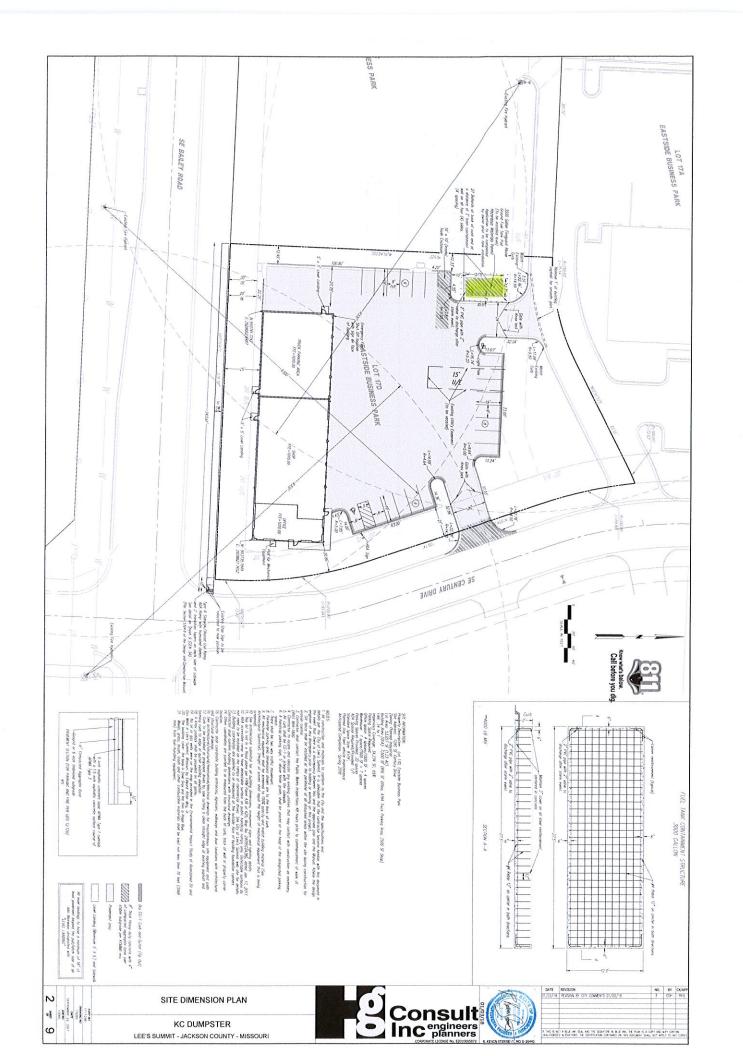
Name of Business: KC Dumpster Co., UC	Phone: 816. 491.4811
Address/Location: 1280 SE Century Drive	Apt/Suite:
Applicant's Name: Rody Taylor	Phone: 816.591.2135
Mailing Address: 1280 SE Century Drive	Title: Owner
City, State, Zip: MCS Sumit, Mo (408)	
Type of Business: was roll-off drupstor re	ntal
TYPE OF MATERIAL(S):	Describes Materials
Explosives/Blasting Agents	☐ Reactive Materials
Compressed Gases	☐ Cryogenics
Flammable/Combustible Liquids	☐ Highly Toxic
☐ Flammable Solids	☐ Radioactive
Organic Peroxides	☐ Corrosive
Oxidizers .	Carcinogens
Pyrophoric Materials	Other (List)
QUANTITIES OF MATERIAL(S): Substance (Name) CAS # UN# diescl fue!	Quantity Extremely Hazardous (pounds) Substances 3,000 gallons - Zth,000 Hs
engine oil	110 gallons - 770 165
usid engine oil	250 gollons - 1750 100
acetylene gas	14 pounds \Box
J U . T	

^{*} Submit Material Safety Data Sheets (MSDS) with application

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For Office Use Only

Hazard Assessment Required: Yes	□ No ⊠	Shift
Sent to LEPC: Yes 🗆		PFA Assigned: Review Denied Den
Plans Required: Yes ☑ No □		
Date:		Ву:
PFA Number:		Date Issued:
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Reviewed by: MIKE WEISSE	NBMH MI	Ton Eoo Rank: CAAMN



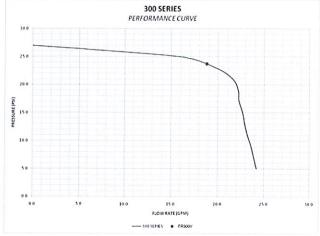


The Most Trusted Name in Pumps and Meters

Motor Power -AC 115, 230, 115/230	115/230 VOLT		
HZ 50, 60, 50/60	60/50		
Power - DC 12, 24, 12/24	None		
HP (horsepower) rating	1/2		
Power cord length	None		
Power cord gauge	N/A		
Power cord DC battery connectors	N/A N/A		
Amps (FLA)			
RPM	8.2/4.1/9.2/4.6 A		
	1150/950		
Duty cycle	30 min.		
Thermal protection switch	Y		
Circuit protection fuse	NONE		
Certification	UL, cUL		
Pump	T		
Type- rotary, diaphragm, gear, vane	Rotary Vane		
GPM in supplied configuration	18.8		
GPM open flow - no hose or nozzle	21.4		
By-pass pressure rating (psi) - Max	26		
Dry vac (in Hg)	14		
Head- Max	60.06		
Anti-siphon valve	Anti-siphon Ready		
Inlet - Size / Thread	1 ¼"		
Outlet – Size / Thread	NPT		
Mount	Bung (NPT)		
Materials of construction -pump housing	Cast Iron		
Materials of construction- wetted material	Buna		
Rotor materials of construction	80% Iron/20% Copper		
Rotor vane material of construction	Carbon		
Compatible fluids	Diesel, Gasoline, Bio-Diesal up to B20, E15, Kerosene		
Strainer mesh size	40 x 40 x .008"		
Warranty (yr)	2 Years		
Accessories			
Suction pipe material	None		
Suction pipe length- extended/not extended	None		
Nozzle- size	1"		
Nozzle- manual / automatic	Manual		
Hose liquid materials compatibility	Black Nitrile Rubber		
Hose diameter	1"		
Hose length	12'		
Hose static wire (Y/N)	Y Y		
Logistics	L		
UPC	0-89404-07701-6		
Length	19		
Width	18		
Height	18		



Sku/Kit #'s	Small Pump Kits	Consists of
KIT300BD	Bio-Diesel	Special Shaft Seal Assembly, Gasket, Inlet Gasket, Bypass O-ring
KIT300BV	Bypass	Poppet, Spring, O-ring, Cap
KIT300JC	Junction Box	Junction Box Cover, O-Ring, Hardware
KIT300NB	Nozzle Boot	Nozzle Boot, Attaching Hardware
KIT300NR	Nozzle Retainer	Lockable Nozzle Retainer, Hardware
КІТЗОООТ	Outlet	Outlet Flange, O-Ring Seal, hardware
KIT300RG	Rotary Group	Rotor, 8 Vanes, Rotor Key, Gasket, Rotor Cover, 4 Screws
KIT300SW	Switch Lever	Switch Lever, Nut
KIT700AS	Anti-Siphon	Anti-Siphon Hose and Hardware
KIT700BG	Inlet	Inlet Adapter
KIT700SL	Shaft Seal	8 Piece Assembly





Tuthill Transfer Systems 8825 Aviation Drive Fort Wayne, IN 46809 (800) 634-2695 www.tuthill.com

MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET - Complies with ANSI Z400.1 Draft Standard for the Preparation of Material Safety Data Sheets, Copyright 1991, Chemical Manufacturers Association. May be used to comply with U.S. Department of Labor OSHA's Hazard Communication Standard, 29 CFR 1910,1200. Standards must be consulted for specific requirements.

Date: 02/13/2002

Unocal '76' **Guardol 15W/40 Motor Oil**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Unocal Guardol 15W/40

GENERIC NAME: Crankcase Oil COMPANY IDENTIFICATION

Unocal Refining & Marketing Division

1201 West 5th Street Los Angeles, CA 90017

CHEMICAL FAMILY: Petroleum Hydrocarbon

EMERGENCY/TECHNICAL NUMBERS

(213) 977-7589 CHEMTREC:

(800) 424-9300 (continental U.S.)

(202) 483-7616 (collect in Hawaii & Alaska)

PRODUCT INFORMATION: MSDS Requests and Product Information: (213) 977-7589

SPECIAL NOTES:

2. COMPOSITION / INFORMATION INGREDIENTS

COMPONENTS	CAS No.	OSHA Exposure Limits (PEL)	ACGIH Recommended Limits (TLV)	Percent by Weight
Oil Mist (if generated)	8012-95-1	5 mg/m ³	5 mg/m ³	n/a
Proprietary Zinc Compound	Proprietary	n/a	n/a	1.000-2.000
Hydrotreated Distillate,	64742-54-7	5 mg/m ³	5 mg/m ³	0.0-86.000
Heavy Paraffin				
Solvent Dewaxed Distillate,	64742-65-0	5 mg/m³	5 mg/m ³	0.0-86.000
Heavy Paraffin				
Solvent Refined Distillate,	64742-65-0	5 mg/m ³	5 mg/m ³	0.0-3.000
Heavy Paraffin				
Trade Secret	Proprietary	n/a	n/a	9.000-13.000

COMPOSITION COMMENTS:

None.

3. HAZARDS IDENTIFICATION

PRECAUTIONARY WARNING: Used motor oil is a possible skin cancer hazard based on animal data. Liquid or vapor may ignite. Keep away from all sources of ignition. DO NOT pressurize, cut, weld, braze, solder, grind, or drill on or near container. "Empty" container retains residue (liquid and/or vapor) and may explode in the heat of a fire.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE OF ENTRY: Nasal or oral

EYE: This material may cause mild eye irritation. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing or redness.

SKIN: This material may cause mild skin irritation. Prolonged or repeated contact or exposure to vapors or mists may cause redness and burning, and drying and cracking of the skin. No harmful effects are expected from skin absorption of this material. Persons with pre-existing skin disorders may be more suceptible to the effects of this material.

MSDS: Unocal Guardol 15W/40 Motor Oil: Page 1 of 4

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified

as a possible carcinogen by IARC.

NTP: NDA

IARC MONOGRAPHS: NDA

OSHA REGULATED: NDA

TERATOGENIC: NDA

MUTAGENIC: NDA

12. ECOLOGICAL INFORMATION

No Data Available.

13. DISPOSAL CONSIDERATIONS

Material may be absorbed into an appropriate absorbent material. Dispose of in accordance with all local, county, state, and federal regulations. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

14. TRANSPORTATION INFORMATION

NAME OF CONTENTS: N/A

REPORTABLE QUANTITY: NDA

CONSTITUENTS: No hazardous substances at regulated levels HAZARD CLASS: Not regulated.

UN/NA NUMBER: NDA

POISON INHALATION HAZARD: NDA

EMERGENCY RESPONSE NUMBER: (800) 424-9300 ConUS or (202) 483-7616 collect in Hawaii & Alaska.

15. REGULATORY INFORMATION

This product contains a proprietary zinc compound, which is subject to the reporting requirements of SARA 313 and 40 CFR 372.

Originally prepared by: Unocal Refining & Marketing Division, MSDS Coordinator, 7 May 1991.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

MSDS: Unocal Guardol 15W/40 Motor Oil: Page 4 of 4



Crude Logistics

MATERIAL SAFETY DATA SHEET NO. 2 DIESEL FUEL. LOW SULFUR, ALL GRADES

Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

NO.2 DIESEL FUEL, LOW SULFUR, ALL GRADES

CHEMICAL FAMILY NAME:

Diesel Fuel

U.N. NUMBER:

ADDRESS:

NA 1993

U.N. DANGEROUS GOODS CLASS:

Diesel Fuel, Class 3, Combustible Liquid with flash point greater than 100°F

SUPPLIER/MANUFACTURER'S NAME:

NGL Crude Logistics, LLC.

EMERGENCY PHONE:

2900 North Loop West Suite 1250, Houston, TX 77092 USA 800-424-9300 Chemtrec

BUSINESS PHONE:

TOLL-FREE in USA/Canada 713-730-7320 (Product Information)

WEB SITE:

www.nglep.com

DATE OF PREPARATION:

January 3, 2012

DATE OF LAST REVISION:

New

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a transparent, clear to yellow or red liquid with a characteristic or kerosene-like odor. Health Hazards: Harmful if swallowed - may enter lungs if swallowed or vomited. May cause irritation to eyes upon contact. Vapors from heated product may cause respiratory irritation.

Flammability Hazards: Combustible liquid with a flash point of 52°C (125.6°F)

Reactivity Hazards: This product is not reactive.

Environmental Hazards: Release of the product may cause adverse effects to the aquatic environment.

Emergency Recommendations: Emergency responders must have personal protective equipment and fire protection appropriate for the situation to which they are responding.

US DOT SYMBOLS

CANADA (WHMIS) SYMBOLS

EUROPEAN and (GHS) Hazard Symbols













Signal Word: Warning!

EU LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008 Annex 1

EC# 270-676-1Annex 1 Index# 649-227-00-2

GHS Hazard Classification(s):

Carcinogen Category 2 **Aspiration Toxicity Category 2**

Hazard Statement(s):

H304: May be fatal if swallowed and enters the airways

H320: Causes eve irritation

H335: May cause respiratory irritation

Precautionary Statement(s):

P260: Do not breath dust/fume/gas/mist/vapors/spray

P264: Wash hands thoroughly after handling

P280: Wear protective gloves/protective clothing/eye

protection/face protection

EU HAZARD CLASSIFICATION PER DIRECTIVE 1999/45/EC:

[Xn] Harmful

Risk Phrases:

R20: Harmful if swallowed

R40: Limited evidence of carcinogenic effects

R65: Harmful: may cause lung damage if swallowed

Safety Phrases:

S37/39: Wear suitable gloves and eye/face protection S45: In case of an accident or if you feel unwell, seek

medical advice immediately

S62: If swallowed do not induce vomiting

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Date of Last Revision: 1/3/2012

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

INHALATION: Negligible unless heated to produce vapors. Vapors or finely misted materials may irritate the mucous membranes and cause irritation, dizziness, and nausea.

EYE CONTACT: May cause eye irritation with tearing, redness or stinging. High vapor concentrations may cause irritation.

SKIN CONTACT: Prolonged or repeated contact is not likely to cause significant skin irritation.

INGESTION: Harmful if swallowed - may enter lungs if swallowed or vomited.

CHRONIC:

Secondary effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

TARGET ORGANS:

ACUTE: Eye, Respiratory

CHRONIC:

None known

SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS#	EINECS#	ICSC#	WT %	HAZARD CLASSIFICATION; RISK PHRASES	
Diesel Fuel No.2	68476-34-6	270-676-1	1561	100%	HAZARD CLASSIFICATION: Carc Cat 3, [Xn] Harmful RISK PHRASES: R40	
		Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).				

NOTE:

ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the 29 CFR 1200 and the MSDS contains all the information required by the 29 CFR 1200, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000.

SECTION 4 - FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, hold eyes open while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling product. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder clothing before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current response information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing respiratory system or eye problems may be aggravated by prolonged contact.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate over exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT:

AUTOIGNITION TEMPERATURE:

FLAMMABLE LIMITS (in air by volume, %):

FIRE EXTINGUISHING MATERIALS:

UNUSUAL FIRE AND EXPLOSION HAZARDS:

125.6°F (52°C) (Pensky-Martens closed cup)

>489°F (>254°C)

Lower (LEL): 0.6% Upper (UEL): 7.5%

Extinguish with foam, carbon dioxide, dry powder or water fog.

Combustible liquid! This material releases vapors when heated above

ambient temperatures.

SPECIAL FIRE-FIGHTING PROCEDURES:

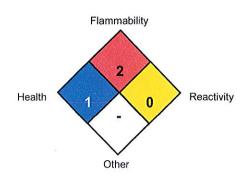
Incipient fire responders should wear eye protection. firefighters must wear self-contained breathing apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done

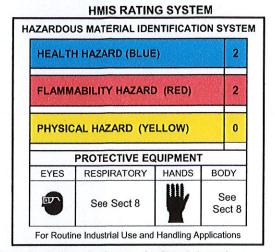
Date of Last Revision: 1/3/2012

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without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM





Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: Contain spill if safe to do so. Small Liquid Spills: Absorb with sand or other non-combustible absorbent material. Large Spillages: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal. Dispose of in accordance with applicable federal, state, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING AND STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

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RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limit guidelines listed above. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or by EU member states.

EYE PROTECTION: Use safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR

1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact as appropriate for task (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:

APPEARANCE & ODOR:

ODOR THRESHOLD (PPM):

VAPOR PRESSURE (mmHg): VAPOR DENSITY (AIR=1):

EVAPORATION RATE (nBuAc = 1):

BOILING POINT (C°): FREEZING POINT (C°):

pH:

SPECIFIC GRAVITY 20°C: (WATER =1)

SOLUBILITY IN WATER (%)

VOC%:

Liquid

Transparent, clear to yellow or red color with characteristic

or kerosene-like odor.

Mild

<2 mm Hg @ 20°C

AP 5

Not Available >154°C (>309°F) Not Available Not Applicable

0.84 Slight

840 g/I VOC (w/v)

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: None known

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing agents, acids

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Contact with incompatible materials

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: The following toxicity data is available for this product:

CAS# 68476-34-6 Oral LD 50

12,000 mg/kg

Rat

SUSPECTED CANCER AGENT: None of the ingredients of this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are not considered to be, or suspected to be cancer-causing agents by these agencies.

IRRITANT INFORMATION: Vapors from this product can be irritating to eyes and respiratory system.

SENSITIZER INFORMATION: This product is not considered a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: There is no evidence that this product may cause reproductive effects.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL STABILITY: This product is biodegradable

EFFECT OF MATERIAL ON PLANTS or ANIMALS: This material has not been tested for its effects on plants and animals

EFFECT OF CHEMICAL ON AQUATIC LIFE: This material has not been tested for effects on aquatic life.

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on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances:

Listed U.S. TSCA: Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett

MSDS Authoring PLUS

Disclaimer: To the best of NGL Crude Logistics LLC's knowledge, the information contained herein is reliable and accurate as of this date; however, NGL Crude Logistics, LLC assumes no liability for the reliability or accuracy of the information contained herein and no warranties of any type either express or implied are provided. Final determination of suitability of any material is the sole responsibility of the user. The information contained herein relates only to this specific product.

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SAFETY DATA SHEET



Acetylene

Section 1. Identification

GHS product identifier

: Acetylene

Chemical name

: acetylene

Other means of

: Ethyne; Ethine; Narcylen; C2H2; Acetylen; UN 1001; Vinylene

identification

: Gas.

Product type Product use

: Synthetic/Analytical chemistry.

Synonym

: Ethyne; Ethine; Narcylen; C2H2; Acetylen; UN 1001; Vinylene

SDS#

: 001001

Supplier's details

: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

24-hour telephone

: 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE GASES - Category 1

GASES UNDER PRESSURE - Compressed gas

GHS label elements

Hazard pictograms





Signal word

Danger

Hazard statements

Extremely flammable gas.

May form explosive mixtures with air.

Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.

Precautionary statements

General

: Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Fusible plugs in top, bottom, or valve melt at 98°C to 107°C (208°F to 224°F). Do not discharge at pressures above 15psig (103kpa). Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

Prevention

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response

: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

Storage

: Protect from sunlight. Store in a well-ventilated place.

Disposal

Not applicable.

Hazards not otherwise

: In addition to any other important health or physical hazards, this product may displace

Section 3. Composition/information on ingredients

Substance/mixture

: Substance

Chemical name

: acetylene

Other means of

identification

: Ethyne; Ethine; Narcylen; C2H2; Acetylen; UN 1001; Vinylene

Product code

: 001001

CAS number/other identifiers

CAS number : 74-86-2

Ingredient name	%	CAS number
acetylene	100	74-86-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

: Contact with rapidly expanding gas may cause burns or frostbite. Skin contact **Frostbite** : Try to warm up the frozen tissues and seek medical attention.

: As this product is a gas, refer to the inhalation section. Ingestion

Over-exposure signs/symptoms

Eye contact : No specific data. : No specific data. Inhalation Skin contact : No specific data. : No specific data. Ingestion

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 4. First aid measures

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill

: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Use only non-sparking tools. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
acetylene	NIOSH REL (United States, 10/2016). CEIL: 2662 mg/m³ CEIL: 2500 ppm ACGIH TLV (United States, 3/2017). Oxygen Depletion [Asphyxiant].
	California PEL for Chemical Contaminants (Table AC-1) (United States). Oxygen Depletion [Asphyxiant].

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas.
Color : Colorless.

Odor : Mild. Ethereal.
Odor threshold : Not available.
pH : Not available.

Melting point : -81°C (-113.8°F)

Boiling point : Not available.

Critical temperature : 35.25°C (95.5°F)

Flash point : Closed cup: -18.15°C (-0.67°F)

: Lower: 2.5%

Evaporation rate : Not available.

Flammability (solid, gas) : Extremely flammable in the presence of the following materials or conditions: open

flames, sparks and static discharge and oxidizing materials.

Highly flammable in the presence of the following materials or conditions: heat.

Lower and upper explosive

(flammable) limits Upper: 100%
Vapor pressure : 635 (psig)
Vapor density : 0.907 (Air = 1)
Specific Values (ft 3/lb) : 14 7058

Specific Volume (ft ³/lb) : 14.7058 Gas Density (lb/ft ³) : 0.0691

Relative density : Not applicable.

Solubility : Not available.

Solubility in water : 1.2 g/l

Solubility in water
Partition coefficient: n-

octanol/water

: 0.37

Section 9. Physical and chemical properties

Decomposition temperature: Not available.

Viscosity

: Not applicable.

Flow time (ISO 2431)

: Not available.

Molecular weight

: 26.04 g/mole

Aerosol product

Heat of combustion

: -48257522 J/kg

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials

: Oxidizers

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization

: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Section 11. Toxicological information

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact

: Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion: As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General
 No known significant effects or critical hazards.
 Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Disconnectation materials

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
acetylene	0.37	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1001	UN1001	UN1001	UN1001	UN1001
UN proper shipping name	ACETYLENE, DISSOLVED	ACETYLENE, DISSOLVED	ACETYLENE, DISSOLVED	ACETYLENE, DISSOLVED	ACETYLENE, DISSOLVED
Transport hazard class(es)	2.1	2.1	2.1	2.1	2.1
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

[&]quot;Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Additional information

DOT Classification

: Limited quantity Yes.

Quantity limitation Passenger aircraft/rail: Forbidden. Cargo aircraft: 15 kg.

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).

Explosive Limit and Limited Quantity Index

0

Passenger Carrying Ship Index

75

Passenger Carrying Road or Rail Index

Earhiddan

Section 14. Transport information

Special provisions

Quantity limitation Passenger and Cargo Aircraft: Forbidden. Cargo Aircraft Only: 15 IATA

Special precautions for user: Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL and

the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act (CAA) 112 regulated flammable substances: acetylene

Clean Air Act Section 112

(b) Hazardous Air

: Not listed

Pollutants (HAPs)

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602

: Not listed

Class II Substances

DEA List I Chemicals

: Not listed

(Precursor Chemicals) **DEA List II Chemicals**

: Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Refer to Section 2: Hazards Identification of this SDS for classification of substance.

State regulations

: This material is listed. Massachusetts : This material is not listed. **New York** : This material is listed. **New Jersey** : This material is listed. Pennsylvania

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

HAIFOF Assiss Ductocal on DODs and Hassis Matala

Section 15. Regulatory information

Not listed.

Inventory list

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : Japan inventory (ENCS): This material is listed or exempted.

Japan inventory (ISHL): Not determined.

Malaysia : Not determined.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Thailand : Not determined.

Turkey : This material is listed or exempted.
United States : This material is listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 1	Expert judgment

Section 16. Other information

History

Date of printing : 1/18/2018

Date of issue/Date of : 1/18/2018

revision

Date of previous issue : 10/10/2017

Version : 1.01

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

▼ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SECTION 14 - TRANSPORTATION INFORMATION

THIS PRODUCT IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Diesel Fuel, Combustible Liquid

HAZARD CLASS NUMBER and DESCRIPTION: Class 3, Combustible Liquid with a flash point greater than 100°F

UN IDENTIFICATION NUMBER: NA 1993

PACKING GROUP: PGIII

DOT LABEL(S) REQUIRED: Class 3 Flammable

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2004): 128

MARINE POLLUTANT: Product or ingredients are not classified by the DOT as a Marine Pollutant (as defined by 49

CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is classified as Dangerous Goods, by rules of IATA

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS:

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) as follows:

SARA 313 Reporting Naphthalene CAS# 91-20-3 <2%, Ethylbenzene CAS# 100-41-4 <0.9%

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health:

Yes

Chronic Health: No

Fire: Yes

Reactivity: No

U.S. CERCLA REPORTABLE QUANTITY (RQ): CERCLA petroleum exemption applies.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does contain ingredient(s) are on the California Proposition 65 lists.

WARNING! This product contains ingredients that are known to the State of California to cause cancer or Reproductive harm.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as "Not Controlled" as per the Controlled Product regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed

Date of Last Revision: 1/3/2012

Page 5 of 6

INGESTION: While this material has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract.

<u>INHALATION:</u> While this material has a low degree of toxicity, breathing high concenttrations of vapors or mists may cause irritation of the nose and throat.

<u>CHRONIC EFFECTS:</u> Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

OTHER NOTES: It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

4. FIRST AID MEASURES

SIGNS AND SYMPTOMS OF EXPOSURE

EYE: Irritation, redness, watering

SKIN: Mild irritation, redness

<u>INGESTION:</u> Irritation to the digestive tract <u>INHALATION:</u> Irritation to nose and/or throat

FIRST AID PROCEDURES In an emergency, have physician call Los Angeles Poison Control Center (24 hrs.) 1-800-356-3129

EYE: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

<u>SKIN:</u> Wipe material from skin and remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

INGESTION: No first aid is normally required; however, if swallowed, and symptoms develop, seek medical attention.

<u>INHALATION:</u> If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Flammable

FLASH POINT / METHOD USED: 419 °F (215 °C)

AUTOIGNITION: N/A

FLAMMABILITY LIMITS (% by volume in air):

LEL: N/A

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide (CO₂), halon, foam or water spray is recommended

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS: This material will burn although it is not easily ignited.

<u>UNUSUAL FIRE AND EXPLOSIVE HAZARDS:</u> This material may burn, but will not ignite readily. If container is not properly cooled, it may explode in the heat of a fire. Vapors are heavier than air and may accumulate in low areas.

<u>SPECIAL FIRE FIGHTING PROCEDURES:</u> Wear appropriate protective equipment including respiratory protection as conditions warrant. Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

<u>COMBUSTION PRODUCTS:</u> Combustion may yeild major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS: May ignite. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Isolate hazard area and limit entry to authorized personnel. Stop spill/release if it can be done without risk. Wear appropriate protective including respiratory protection as conditions warrant (see Section 3). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systemsand natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify fire authorities and appropriate federal, state and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon U.S. navigable waters, the Contiguous Zone, or adjoining shorelines, notify the National Response Center (1-800-424-8802). For highway or railway spills, contact CHEMTREC (1-800-424-9300 ConUS, or 1-202-483-7616 collect in Alaska & Hawaii).

MSDS: Unocal Guardol 15W/40 Motor Oil: Page 2 of 4

<u>CLEANUP MEASURES:</u> Immediate cleanup of any spill is recommended. Spilled material may be absorbed into an appropriate absorbent material. Dispose of product in accordance with local, county, state, and federal regulations.

7. HANDLING AND STORAGE

NORMAL STORAGE: Use and store this material in cool, dry, well ventillated areas away from heat and all sources of ignition. Keep container(s) closed. Store only in approved containers. Keep away from any incompatible materials (see Section 10). Protect container(s) against physical damage. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276. The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2, 3, & 4).

<u>HANDLING:</u> Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this product, refer to occupational safety and health administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>ENGINEERING CONTROLS:</u> If current ventillation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

RESPIRATORY PROTECTION: The use of respiratory protection is advised when concentrations exceed the established exposure limits (see Section 2). Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (NIOSH approved, if available) or supplied air equipment.

EYE AND FACE PROTECTION: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended. SKIN AND HAND PROTECTION: The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation. Impervious clothing should be worn as needed. It is recommended that a source of clean water be available in the work area for flushing eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Clear brown liquid

ODOR: Characteristic petroleum

VAPOR PRESSURE (mm Hg): Not determined

BOILING POINT: >555°F / 291°C VISCOSITY: 109 cSt @ 40°C

SPECIFIC GRAVITY (H,O = 1): 0.89 @ 15°C

FLASH POINT: 419°F / 215°C VAPOR DENSITY (AIR = 1): >1

EVAPORATION RATE (BUTYL ACETATE = 1): <1

SOLUBILITY: Negligible % VOLATILE: Negligible

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Extended exposure to high temperatures may cause decomposition.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong oxidizing agents.

<u>HAZARDOUS DECOMPOSITION PRODUCTS:</u> Combustion may yield major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

MSDS: Unocal Guardol 15W/40 Motor Oil: Page 3 of 4