



MATERIAL SAFETY DATA SHEET

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHS Inc.
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Transportation Emergency (CHEMTREC): 1-800-424-9300
Technical Information: 1-651-355-8443
MSDS Information: 1-651-355-8438

PRODUCT NAME: No. 2 Ultra Low Sulfur Diesel Fuel / Distillate
COMMON NAME: #2 Diesel Fuel, #2 Distillate, Fuel Oil
Fieldmaster XL Diesel Fuel, Roadmaster XL Diesel Fuel
CHEMICAL NAME: Petroleum Distillate
CHEMICAL FAMILY: A mixture of paraffinic, olefinic, naphthenic and aromatic hydrocarbons.

MSDS: 0201-M1A0.3 – Rev. B (02/16/07)

CHEMICAL FORMULA: Mixture

Section 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENTS	PERCENTAGES (by weight)	PEL (OSHA)	TLV (ACGIH)	CAS #
Diesel Fuel	99-100%	N/D	N/D	68476-34-6
Sulfur	(15 ppm)	N/D	N/D	7704-34-9

Other components: 1,2,4- Trimethylbenzene (95-52-4, <0.6%), Biphenyl (92-52-4, <0.6%), Xylene (1330-20-7, <0.2%)
Naphthalene (91-20-3, <0.2%)

(TWA) - Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.

(STEL) - Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

A clear, to yellow or red liquid with a hydrocarbon odor. **Danger! Harmful or Fatal If Swallowed**

OSHA Hazard Classes

Based on OSHA definitions, the following ingredients in this product are hazardous. The OSHA physical and health Hazard categories are shown below. **Note: CHS has not conducted specific toxicity tests on this product.**

Our hazard evaluation is based on information from similar ingredients, technical literature, and/or professional experience.

Diesel Fuel - Combustible, toxic (moderate), target organ (Skin, Central Nervous System)

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: (Eye Contact, Dermal, Inhalation, Ingestion.)

ACUTE EFFECTS OF OVER EXPOSURE:

Eyes - Contact with eyes may cause irritation.

Skin - Contact with skin may cause irritation.

Inhalation - May cause respiratory tract irritation. High levels may cause headache, dizziness, nausea, vomiting in-coordination and unconsciousness.

Ingestion - May cause nausea, vomiting, cramping, diarrhea, and central nervous system depression. Pulmonary irritation from exhaling solvent and delayed signs of liver and kidney damage may also occur.

CHRONIC EFFECTS OF OVER EXPOSURE: Dermatitis from chronic exposure. Products of similar composition (boiling ranges of 100-700; naphtha, jet fuel, diesel fuel, etc.) were tested on laboratory animals by repeatedly applying and never washing from the animal's skin. Weak to moderately positive results were found in mouse skin cancer studies, mixed and inconsistent results were found in mutagenicity studies, and negative results were found in rate teratology studies. A few studies have shown that washing the animal's skin with soap and water between treatment greatly reduces the carcinogenic skin cancer in humans. This material is not listed as a carcinogen by International Association for Research on Cancer, or Occupational Safety and Health Administration.

Prolonged exposure from inhalation of vapors may cause dizziness, weakness, weight loss, anemia, nervousness, pains in the limbs, peripheral numbness, and paresthesia. Degenerative changes in the liver and kidneys may occur after prolonged exposure to high concentrations.

The National Institute for Occupational Safety and Health (NIOSH), based on findings or carcinogenic and tumorigenic responses of mice and rats exposed to whole diesel exhaust, recommends that diesel exhaust be regarded as a "potential occupational carcinogen".

Medical Conditions Aggravated By Exposure: Conditions which have the same symptoms or effects as stated above.

Carcinogenic Potential: this material may contain ethylbenzene and naphthalene at concentrations above 0.1%. IARC has identified ethylbenzene and naphthalene as possibly carcinogenic to humans (group 2) based on laboratory animal studies. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen.

Section 4 - FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact - If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for fifteen minutes, occasionally lifting the lower and upper lids. Get medical attention.

Skin Contact - If the material comes in contact with the skin, wash the contaminated skin with soap and water promptly. If the material penetrates through clothing, remove the clothing and wash the skin with soap and water promptly. If irritation persists after washing, get medical attention immediately.

Inhalation - If person breathes in large amounts of material, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. Get medical attention as soon as possible.

Ingestion - If material has been swallowed, do not induce vomiting. Get medical attention immediately.

Section 5 - FIRE - FIGHTING MEASURES

FLASH POINT: >125°F (>52°C) (PMCC)

AUTO IGNITION TEMP: >494°F

FLAMMABLE LIMITS IN AIR
% BY VOLUME

LOWER
0.6

UPPER
7.5

EXTINGUISHING MEDIA: Use water spray to cool fire exposed surfaces and to protect personnel. Use foam, dry chemical or water spray (fog) to extinguish fire.

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective on flames, but should be used to keep fire-exposed containers cool. Water or foam sprayed into container or hot burning product could cause frothing and endanger fire fighters. Large fires, such as tank fires, should be fought with caution. If possible, pump the contents from the tank and keep adjoining structures cool with water. Avoid spreading burning liquid with water used for cooling purposes. Do not flush down public sewers. Avoid inhalation of vapors. Fire fighters should wear self-contained breathing apparatus. Combustion may produce CO, CO₂, oxides of nitrogen, oxides of sulfur, and reactive hydrocarbons.

Section 10 - STABILITY AND REACTIVITY

STABILITY:

STABLE X (At room temperature and pressure. See handling and storage section)

UNSTABLE

INCOMPATIBILITY -

CONDITIONS TO AVOID: Heat, flame, static electricity and other ignition sources.

MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include carbon monoxide, carbon dioxide, and other petroleum decomposition products (hydrocarbons).

HAZARDOUS POLYMERIZATION: Has not been reported to occur under normal temperatures and pressures.

Section 11 - TOXICOLOGY INFORMATION

Note: CHS has not conducted specific toxicity tests on this product.

Section 12 - ECOLOGICAL INFORMATION

Note: CHS has not conducted specific ecological tests on this product.

Section 13 - DISPOSAL CONSIDERATION

WASTE DISPOSAL PROCEDURES: Place contaminated materials in a disposable container and dispose of in accordance with Local, State and Federal environmental regulations. Recycle as much of the recovered product as possible. Do not flush to drain or storm sewer or otherwise release to the environment.

Section 14 - TRANSPORTATION

DOT PROPER SHIPPING NAME: Fuel Oil #2

DOT HAZARD CLASS: Combustible Liquid

DOT IDENTIFICATION NUMBER: NA 1993

DOT EMER. RESPONSE GUIDE NO.: 128

(formerly # 27)

Proper Shipping Name-**Fuel Oil #2**; Hazard Class-**3**; UN/NA Identification #-**NA1993**; Packing Group-**III**; Placard-**Combustible Liquid**

Section 15 - REGULATORY INFORMATION

This product does not contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS Number

Chemical Name

Percent by Weight

SARA SECTION 311-312 HAZARD CATEGORIES (40 CFR 370.2):

FIRE: Yes

SUDDEN RELEASE OF PRESSURE: No

REACTIVE: No

ACUTE: Yes **CHRONIC:** Yes

Section 16 - OTHER INFORMATION

Prepared By: Hue Lam

Date: February 16, 2007

Title: EHS Compliance Specialist

Supersedes: June 30, 2006

Reason for Issue: CAS # correction

THE INFORMATION CONTAINED IN THIS MSDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CHS HAS PREPARED THIS MSDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CHS BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS MSDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.



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