CHS

SAFETY DATA SHEET

Section 1. Identification

CHS Inc. Transportation Emergency (CHEMTREC) : 1-800-424-9300

P.O. Box 64089 Technical Information 1-651-355-8443 Mail station 525

St. Paul, MN 55164-0089 SDS Information : 1-651-355-8445

Product name : No. 2 ULTRA LOW SULFUR DIESEL FUEL / DISTILLATE SDS no. : 0201-M1A0.3

(sulfur<15ppm)

Common name : #2 Diesel Fuel, #2 Distillate, Fuel Oil Fieldmaster XL Diesel Fuel, Revision date : 10/17/2017

Roadmaster XL Diesel Fuel

Chemical name : Petroleum Distillate Chemical formula : Mixture

Chemical family: A mixture of paraffinic, olefinic, naphthenic and aromatic

hydrocarbons.

Relevant identified uses of the substance or mixture and uses advised against

Not available.

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 LIQUIDS - Category 3
CARCINOGENICITY - Category 2

GHS label elements

Hazard pictograms





Signal word : Warning

Hazard statements : H226 - Flammable liquid and vapor.

H351 - Suspected of causing cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or

label at hand.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take

precautionary measures against static discharge. Keep container tightly closed.

Response : IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water or shower.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

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

Health:

* 0 Flammability: 2 Physical hazards: 0

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

Health: 1 Flammability: 2 Instability: 0

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Chemical name Petroleum Distillate

Other means of identification : #2 Diesel Fuel, #2 Distillate, Fuel Oil Fieldmaster XL Diesel Fuel, Roadmaster XL Diesel Fuel

Ingredient name	%	CAS number
Fuels, diesel, No 2	≥90	68476-34-6
Ethylbenzene	≤0.3	100-41-4
Naphthalene	<0.25	91-20-3

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 : If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for 15

minutes, occasionally lifting the lower and upper lids. Get medical attention.

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.

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.

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation

Eve contact : No known significant effects or critical hazards. Inhalation No known significant effects or critical hazards. Skin contact No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness. Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact : Adverse symptoms may include the following: irritation, redness.

Ingestion No known significant effects or critical hazards.

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.

Specific treatments No specific treatment.

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 water spray to cool fire exposed surfaces and to protect personnel. Foam, dry chemical or water spray (fog) to extinguish fire.

Unsuitable extinguishing media

Specific hazards arising from the chemical

- Do not use water jet or water-based fire extinguishers.
- Vapors are heavier than air and may travel along the ground to a source of ignition (pilot light, heater, electric motor) some distance away. Containers, drums (even empty) can explode when heat (welding, cutting, etc.) is applied.

Hazardous thermal decomposition products

- No specific data.
- Special protective actions for fire-fighters
- Water may be ineffective on flames, but should be used to keep fire-exposed containers cool. Water or foam sprayed into container of 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. Firefighters should wear self-contained breathing apparatus.

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

: Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Methods and materials for containment and cleaning up

Spill

: Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

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.

Conditions for safe storage, including any incompatibilities

: Do not store above the following temperature: 113°C (235.4°F). Odorous and toxic fumes may form from the decomposition of this product if stored at excessive temperatures for extended periods of time. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuels, diesel, No 2	ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hours. Form: Inhalable fraction and vapor
Ethylbenzene	ACGIH TLV (United States, 3/2017). TWA: 20 ppm 8 hours.
	NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes.
	STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 100 ppm 8 hours.
Naphthalene	TWA: 435 mg/m³ 8 hours. ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 10 ppm 8 hours.
	TWA: 52 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 10 ppm 10 hours. TWA: 50 mg/m³ 10 hours.
	TWA: 50 mg/m³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 10 ppm 8 hours.
	TWA: 50 mg/m³ 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

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. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection : Recommended: Splash goggles and a face shield, where splash hazard exists.

Hand protection : 4 - 8 hours (breakthrough time): Nitrile gloves.

Body protection Other skin protection Respiratory protection

- : Recommended: Long sleeved coveralls.
- : Recommended: Impervious boots.
- : If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate

Section 9. Physical and chemical properties

Relative density : 0.85 **Appearance Evaporation rate** Physical state : Liquid. [Mobile liquid.] Not available Color Solubility Insoluble in the following materials: cold water Clear yellow. Red. and hot water. Odor Characteristic. Hydrocarbon. Solubility in water Insoluble Odor threshold Not available. Partition coefficient: n-Not available. octanol/water рΗ Not available. **Auto-ignition** Not available. Melting point Not available. temperature Decomposition Not available. 157.22 to 343.33°C (315 to 650°F) **Boiling point** temperature SADT Not available. Flash point Closed cup: 60°C (140°F) [Pensky-Martens.] Viscosity Not available. Not available. **Flammability** Vapor pressure Not available. Lower and upper : Not available. explosive (flammable) Vapor density >3 [Air = 1] limits

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. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: Strong oxidizing agents.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethylbenzene	LD50 Dermal LD50 Oral		>5000 mg/kg 3500 mg/kg	-
Naphthalene	LD50 Dermal LD50 Oral		>20 g/kg 490 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Biphenyl	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 μL	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

No. 2 ULTRA LOW SULFUR DIESEL FUEL / DISTILLATE (sulfur<15ppm)

Product/ingredient name	OSHA	IARC	NTP
Ethylbenzene	-	2B	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Name	Result
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of: Dermal contact. Eye contact. Inhalation. Ingestion.

exposure

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Ethylbenzene	Acute EC50 13300 μg/L Fresh water Acute LC50 13900 μg/L Fresh water	Crustaceans - Artemia sp Nauplii Daphnia - Daphnia magna - Neonate	48 hours 48 hours
Naphthalene	Acute EC50 1600 µg/L Fresh water Acute LC50 2350 µg/L Marine water Acute LC50 213 µg/L Fresh water Chronic NOEC 0.5 mg/L Marine water Chronic NOEC 1.5 mg/L Fresh water	Daphnia - Daphnia magna - Neonate Crustaceans - Palaemonetes pugio Fish - Melanotaenia fluviatilis - Larvae Crustaceans - Uca pugnax - Adult Fish - Oreochromis mossambicus	48 hours 48 hours 96 hours 3 weeks 60 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Fuels, diesel, No 2	>3.3	-	low
Ethylbenzene	3.6	-	low
Naphthalene	3.4	36.5 to 168	low

Mobility in soil

Soil/water partition coefficient (Koc) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

DOT IDENTIFICATION NUMBER UN1202 DOT proper shipping name DIESEL FUEL

DOT Hazard Class(es) 3 **DOT EMER. RESPONSE GUIDE NO. 128** PG III

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: Naphthalene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Ethylbenzene; Naphthalene Clean Water Act (CWA) 311: Ethylbenzene; Naphthalene

Clean Air Act Section 602 Class I Substances : Not listed DEA List I Chemicals (Precursor Chemicals) : Not listed Clean Air Act Section 602 Class II Substances : Not listed DEA List II Chemicals (Essential Chemicals) : Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Hazard classifications : FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 2

Composition/information on ingredients

Name	Classification
Fuels, diesel, No 2	FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 2
Ethylbenzene	FLAMMABLE LIQUIDS - Category 2
,	ACUTE TOXICITY (inhalation) - Category 4
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing
	organs) - Category 2
	ASPIRATION HAZARD - Category 1
Naphthalene	FLAMMABLE SOLIDS - Category 2
	ACUTE TOXICITY (oral) - Category 4
	CARCINOGENICITY - Category 2

SARA 313 : 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.

Product name	CAS number	%
· / · · · · ·	100-41-4 91-20-3	0.1 0.1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.

New York: The following components are listed: Ethylbenzene; NaphthaleneNew Jersey: The following components are listed: Ethylbenzene; NaphthalenePennsylvania: The following components are listed: Ethylbenzene; Naphthalene

California Prop. 65

★ WARNING: This product can expose you to chemicals including Ethylbenzene, Naphthalene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Ethylbenzene Naphthalene	Yes. Yes.	-

Section 16. Other information

Revision date : 10/17/2017 Supersedes : 11/15/2013

Revised Section(s) : 1, 2, 3, 4, 8, 9, 11, 12, 14, 15, 16. Prepared by : KMK Regulatory Services Inc.

Notice to reader
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