

**Section 1: IDENTIFICATION**

**Product Name:** #2 ECA MARINE FUEL (Superior)

**Synonyms:** Not available.

**Product Use:** Petrochemical industry: Petroleum refining. Fuel.

**Restrictions on Use:** Not available.

**Manufacturer/Supplier:** Superior Refining Company, LLC  
2407 Stinson Ave  
Superior, WI 54880

**Phone Number:** 403-298-6111

**Emergency Phone:** Chemtrec: 1-800-424-9300  
877-262-2111

**Date of Preparation of SDS:** November 24, 2017

**Section 2: HAZARD(S) IDENTIFICATION****GHS INFORMATION**

**Classification:** Flammable Liquids, Category 3  
Skin Irritation, Category 2  
Carcinogenicity, Category 2  
Specific Target Organ Toxicity (Repeated Exposure), Category 2  
Aspiration Hazard, Category 1

**LABEL ELEMENTS****Hazard****Pictogram(s):****Signal Word:** Danger

**Hazard Statements:** Flammable liquid and vapor.  
Causes skin irritation.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.  
May be fatal if swallowed and enters airways.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical, ventilating, and lighting equipment.  
Use non-sparking tools.  
Take action to prevent static discharges.  
Do not breathe mist, vapours, or spray.  
Wash thoroughly after handling.

Wear protective gloves, protective clothing and eye protection.

**Response:** IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
IF exposed or concerned: Get medical advice/attention.  
Get medical advice/attention if you feel unwell.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or regular foam to extinguish.

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

**Disposal:** Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**Hazards Not Otherwise Classified:** Not applicable.

**Ingredients with Unknown Toxicity:** None.

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

This material is considered hazardous by the Hazardous Products Regulations.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Fuels, diesel	Not available.	68334-30-5	≥ 90
Naphthalene	Not available.	91-20-3	< 1

### Section 4: FIRST-AID MEASURES

**Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.

**Acute and delayed symptoms and effects:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Hemolytic anemia (destruction of red blood cells) is the primary health concern for humans exposed to Naphthalene for either short or long periods of time. Other effects may include nausea, profuse perspiration, vomiting, kidney damage and liver damage. Optic neuritis (inflammation of the optic nerve) has been observed. Cataracts have also occurred.

**Eye Contact:** If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell.

**Acute and delayed symptoms and effects:** May cause eye irritation.

Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Acute and delayed symptoms and effects:** Causes skin irritation.

Signs/symptoms may include localized redness, swelling, and itching. Naphthalene may be absorbed through the skin in harmful amounts.

**Ingestion:** If swallowed: Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

**Acute and delayed symptoms and effects:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Naphthalene may cause liver and kidney damage. May cause blood abnormalities, methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death.

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

**Note to Physicians:** Symptoms may not appear immediately.

### Section 5: FIRE-FIGHTING MEASURES

#### FLAMMABILITY AND EXPLOSION INFORMATION

Flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.

**Sensitivity to Static Discharge:** Take action to prevent static discharges. This material is sensitive to static discharge.

#### MEANS OF EXTINCTION

**Suitable Extinguishing Media:** Small Fire: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

**Unsuitable Extinguishing Media:** Do not use straight streams. CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.

**Products of Combustion:** Oxides of carbon.

**Protection of Firefighters:** Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

#### Section 6: ACCIDENTAL RELEASE MEASURES

**Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

**Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

**Environmental Precautions:** Prevent entry into waterways, sewers, basements or confined areas.

**Methods for Containment:** Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors.

**Methods for Clean-Up:** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

**Other Information:** See Section 13 for disposal considerations.

#### Section 7: HANDLING AND STORAGE

**Handling:**

Do not swallow. Do not breathe mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use non-sparking tools. Take action to prevent static discharges. Wash thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

**Storage:**

Store in a well-ventilated place. Keep cool. Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines****Component**

Fuels, diesel [CAS No. 68334-30-5]

**ACGIH:** 100 mg/m<sup>3</sup> (TWA); Skin; A3; Inhalable fraction and vapor (2007)

**OSHA:** No PEL established.

Naphthalene [CAS No. 91-20-3]

**ACGIH:** 10 ppm (TWA); Skin; A3 (2013)

**OSHA:** 10 ppm (TWA), 50 mg/m<sup>3</sup> (TWA);

15 ppm (STEL) [Vacated];

**PEL:** Permissible Exposure Limit

**TWA:** Time-Weighted Average

**STEL:** Short-Term Exposure Limit

**Engineering Controls:**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)****Eye/Face Protection:**

Wear chemical safety goggles. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

**Hand Protection:**

Wear protective gloves. Consult manufacturer specifications for further information.

**Skin and Body Protection:**

Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled.

**Respiratory Protection:**

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-

purifying respirators.

**General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Red liquid.
<b>Colour:</b>	Red.
<b>Odour:</b>	Hydrocarbon. (Strong.)
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Liquid.
<b>pH:</b>	Not available.
<b>Melting Point / Freezing Point:</b>	-12.2 °C (10 °F) (Pour point)
<b>Initial Boiling Point:</b>	100 °C (212 °F)
<b>Boiling Range:</b>	100 to 337.8 °C (212 to 640 °F)
<b>Flash Point:</b>	37.8 to 93.3 °C (100 to 200 °F) (PMCC)
<b>Evaporation Rate:</b>	Not available.
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Lower Flammability Limit:</b>	Not available.
<b>Upper Flammability Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Not available.
<b>Vapor Density:</b>	Not available.
<b>Relative Density:</b>	0.81 to 0.88 (Water = 1)
<b>Solubilities:</b>	Very slightly soluble in the following materials: cold water and hot water.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	1.9 to 4.1 cSt at 40 °C (104 °F)
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	Not available.
<b>Density:</b>	Not available.

**Coefficient of Water/Oil Distribution:** Not available.

**Section 10: STABILITY AND REACTIVITY**

**Reactivity:** Contact with incompatible materials. Sources of ignition. Exposure to heat.

**Chemical Stability:** Stable under normal storage conditions.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** Contact with incompatible materials. Sources of ignition. Exposure to heat.

**Incompatible Materials:** Strong oxidizers.

**Hazardous Decomposition Products:** Not available.

**Section 11: TOXICOLOGICAL INFORMATION****EFFECTS OF ACUTE EXPOSURE****Product Toxicity**

**Oral:** Not available.

**Dermal:** Not available.

**Inhalation:** Not available.

**Component Toxicity**

Component	CAS No.	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub>
Fuels, diesel	68334-30-5	7500 mg/kg (rat)	> 5000 µL/kg (rabbit)	Not available.
Naphthalene	91-20-3	490 mg/kg (rat)	> 2500 mg/kg (rat)	> 340 mg/m <sup>3</sup> (rat); 1H

**Likely Routes of Exposure:** Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Liver. Kidneys. Central nervous system.

**Symptoms (including delayed and immediate effects)**

**Inhalation:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Hemolytic anemia (destruction of red blood cells) is the primary health concern for humans exposed to Naphthalene for either short or long periods of time. Other effects may include nausea, profuse perspiration, vomiting, kidney damage and liver damage. Optic neuritis (inflammation of the optic nerve) has been observed. Cataracts have also occurred.

**Eye:** May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.



**Skin:** Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Naphthalene may be absorbed through the skin in harmful amounts.

**Ingestion:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Naphthalene may cause liver and kidney damage. May cause blood abnormalities, methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death.

**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Glucose-6-phosphate dehydrogenase deficiency.

**EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)**

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Liver. Kidneys. Central nervous system. Thymus.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation. Diesel fuel may cause damage to the blood, thymus and liver through prolonged or repeated exposure.

**Carcinogenicity:** May cause cancer. Repeated skin contact with Diesel fuel has resulted in irritation and skin cancer in animals.

**Component Carcinogenicity**

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Fuels, diesel	A3	Not listed.	Not listed.	Not listed.	Not listed.
Naphthalene	A3	Group 2B	List 2	OSHA Carcinogen.	Listed.

**Mutagenicity:** Not available.

**Reproductive Effects:** Not available.

**Developmental Effects**

**Teratogenicity:** Not available.

**Embryotoxicity:** Not available.

**Toxicologically Synergistic Materials:** Not available.

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.

**Persistence / Degradability:** Not available.

**Bioaccumulation / Accumulation:** Not available.

**Mobility in Environment:** Not available.

**Other Adverse Effects:** Not available.



**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

**Section 14: TRANSPORT INFORMATION****U.S. Department of Transportation (DOT)**

**Proper Shipping Name:** NA1993, DIESEL FUEL, 3, PG III

**Class:** 3

**UN Number:** NA1993

**Packing Group:** III

**Label Code:**

**Canada Transportation of Dangerous Goods (TDG)**

**Proper Shipping Name:** UN1202, DIESEL FUEL, 3, PG III

**Class:** 3

**UN Number:** UN1202

**Packing Group:** III

**Label Code:**

**Section 15: REGULATORY INFORMATION****Chemical Inventories****US (TSCA)**

The components of this product are in compliance with the chemical notification requirements of TSCA.

**Canada (DSL)**

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

**Federal Regulations****United States**

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**SARA Title III**

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112( r ) TQ (lbs.)
Naphthalene	Not listed.	Not listed.	100	313	U165	Not listed.

**State Regulations****Massachusetts**

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Fuels, diesel	68334-30-5	Listed.
Naphthalene	91-20-3	Listed.

**New Jersey**

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Naphthalene	91-20-3	SHHS

**Note:** SHHS = Special Health Hazard Substance

**Pennsylvania**

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Fuels, diesel	68334-30-5	Listed.
Naphthalene	91-20-3	E

**Note:** E = Environmental Hazard

**California****California Prop 65:**

**WARNING** This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Section 16: OTHER INFORMATION****Disclaimer:**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

**Date of Preparation of SDS:** November 24, 2017

**Version:** 1.1

**GHS SDS Prepared by:** Deerfoot Consulting Inc.

**Phone:** (403) 720-3700