



# Fuel Enhancer

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Distillates, petroleum, hydrotreated middle	(CAS No) 64742-46-7	30 - 60	Flam. Liq. 4 Acute Tox. 4 (Inhalation) Skin Irrit. 2 STOT RE 2 Asp. Tox. 1
Stoddard solvent	(CAS No) 8052-41-3	15 - 40	Flam. Liq. 3 Skin Irrit. 2 Asp. Tox. 1
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	10 - 30	Flam. Liq. 3 Asp. Tox. 1
Solvent naphtha, petroleum, light aromatic	(CAS No) 64742-95-6	1 - 5	Flam. Liq. 3 Skin Irrit. 2 Eye Irrit. 2A Asp. Tox. 1
Fatty acid amine reaction product	Trade secret	1 - 5	Skin Irrit. 2 Eye Irrit. 2A
Benzene, 1,2,4-trimethyl-	(CAS No) 95-63-6	1 - 5	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Eye Irrit. 2A STOT SE 3 Asp. Tox. 1
Nonane	(CAS No) 111-84-2	0.5 - 1.5	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
Naphthalene	(CAS No) 91-20-3	0.1 - 1	Acute Tox. 4 (Oral) Carc. 2
Ethylbenzene	(CAS No) 100-41-4	0.1 - 1	Flam. Liq. 2 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Carc. 2 Asp. Tox. 1
Cumene	(CAS No) 98-82-8	< 0.1	Flam. Liq. 3 Carc. 2 STOT SE 3 Asp. Tox. 1

\* The specific chemical identity and exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Harmful if inhaled. Vapours may cause drowsiness and dizziness. May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Powder, water fog, foam, carbon dioxide.  
Unsuitable extinguishing media : Do not use water jet.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

#### 5.3. Advice for firefighters

Firefighting instructions : Cool closed containers exposed to fire with water.  
Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

#### 6.2. Methods and material for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).  
Methods for cleaning up : Scoop up material and place in a disposal container. Spilled material may present a slipping hazard. Provide ventilation.

#### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.  
Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep locked up and out of reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

Not available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Distillates, petroleum, hydrotreated middle (64742-46-7)		
USA ACGIH	ACGIH TWA	Not applicable
USA OSHA	OSHA PEL (TWA)	Not applicable
Stoddard solvent (8052-41-3)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2900 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Petroleum distillates, hydrotreated light (64742-47-8)		
USA ACGIH	ACGIH TWA	Not applicable
USA OSHA	OSHA PEL (TWA)	Not applicable
Solvent naphtha, petroleum, light aromatic (64742-95-6)		
USA ACGIH	ACGIH TWA	Not applicable
USA OSHA	OSHA PEL (TWA)	Not applicable

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Fatty acid amine reaction product (Trade secret)		
USA ACGIH	ACGIH TWA	Not applicable
USA OSHA	OSHA PEL (TWA)	Not applicable
Benzene, 1,2,4-trimethyl- (95-63-6)		
USA ACGIH	ACGIH TWA	Not applicable
USA OSHA	OSHA PEL (TWA)	Not applicable
Nonane (111-84-2)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Ethylbenzene (100-41-4)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Cumene (98-82-8)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	245 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm

### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. 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.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Translucent.
Color	: Amber.
Odor	: Distinctive.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: ≥65.5°C (≥150 °F)
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.

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Flammability (solid, gas)	: Flammable.
Vapor pressure	: No data available.
Relative vapor density at 20 °C	: No data available.
Relative density	: No data available.
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal storage conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

Fuel Enhancer	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	>10 mg/l but <20 mg/l

Distillates, petroleum, hydrotreated middle (64742-46-7)	
LD50 oral rat	7400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	4.6 mg/l/4h

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.2 mg/l/4h

Solvent naphtha, petroleum, light aromatic (64742-95-6)	
LD50 oral rat	8400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.2 mg/l/4h

Fatty acid amine reaction product (Trade secret)	
LD50 oral rat	> 3000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

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### Benzene, 1,2,4-trimethyl- (95-63-6)

LD50 oral rat	3400 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	18 g/m <sup>3</sup> /4h

### Nonane (111-84-2)

LC50 inhalation rat	3200 ppm/4h
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### Naphthalene (91-20-3)

LD50 oral rat	490 mg/kg
LD50 dermal rat	> 2500 mg/kg
LD50 dermal rabbit	> 20 g/kg
LC50 inhalation rat	> 340 mg/m <sup>3</sup> /1h
LC50 inhalation rat	> 0.4 mg/l/4h

### Ethylbenzene (100-41-4)

LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15354 mg/kg
LC50 inhalation rat	17.2 mg/l/4h

### Cumene (98-82-8)

LD50 oral rat	1400 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	39000 mg/m <sup>3</sup> /4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Suspected of causing cancer.

### Naphthalene (91-20-3)

IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen

### Ethylbenzene (100-41-4)

IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	1 - Evidence of Carcinogenicity

### Cumene (98-82-8)

IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	1 - Evidence of Carcinogenicity

Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Harmful if inhaled. Vapours may cause drowsiness and dizziness. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Fuel Enhancer	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Fuel Enhancer	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Handle empty containers with care because residual vapors are flammable.

### SECTION 14: Transport information

In accordance with DOT

#### 14.1. UN number

DOT NA no. NA1993

#### 14.2. UN proper shipping name

DOT Proper Shipping Name : Combustible liquid, n.o.s. (Petroleum distillates)

Department of Transportation (DOT) Hazard Classes : Combustible liquid

Packing group (DOT) : III

#### 14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Benzene, 1,2,4-trimethyl- (95-63-6)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

Nonane (111-84-2)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Naphthalene (91-20-3)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	0.1 %

2-Ethylhexanol (104-76-7)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

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Ethylbenzene (100-41-4)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %
Cumene (98-82-8)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

### 15.2. US State regulations

#### Fuel Enhancer

State or local regulations	This product contains chemicals known to the State of California to cause cancer.
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### SECTION 16: Other information

Indication of changes	: None.
Date of issue	: 06/01/2015
Other information	: None.

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