

**SECTION 1 Identification****1.1. Product identifier**

Product form : Mixture  
Product name : Cetane Power Booster  
Part Number : 11031

**1.2. Other means of identification**

No additional information available

**1.3. Recommended use of the chemical and restrictions on use**

Use of the substance/mixture : Fuel additives

**1.4. Supplier's details**

Lucas Oil Products, Inc.  
3199 Harrison Way NW  
Corydon, IN 47112  
USA  
T 800-342-2512  
[sds@lucasoil.com](mailto:sds@lucasoil.com) - [www.LucasOil.com](http://www.LucasOil.com)

**1.5. Emergency phone number**

Emergency number : For Chemical Emergency Call ChemTel 24hr/day 7days/week. Within USA, Canada, Puerto Rico & US Virgin Islands: 1-800-255-3924. International: 1-813-248-0585 (collect calls accepted). Australia: 1-300-954-583. Brazil: 0-800-591-6042. China: 400-120-0751. India: 000-800-100-4086. Mexico: 800-099-0731.

**SECTION 2 Hazard Identification****2.1. Classification of the substance or mixture****GHS US classification**

Flammable liquid, Category 4	H227	Combustible liquid.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

**2.2. Label elements****GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H227 - Combustible liquid  
H302+H332 - Harmful if swallowed or if inhaled  
H361 - Suspected of damaging fertility or the unborn child  
H411 - Toxic to aquatic life with long lasting effects

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Precautionary statements (GHS US)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P308+P313 - If exposed or concerned: Get medical advice/attention. P312 - Call a poison center or doctor if you feel unwell. P330 - Rinse mouth. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403 - Store in a well-ventilated place. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No.: 64742-54-7	30 - 60*	Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2-Ethylhexyl nitrate	CAS-No.: 27247-96-7	15 - 40*	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia	CAS-No.: 337367-30-3	1 - 5*	Skin Irrit. 2, H315 Aquatic Chronic 3, H412
Distillates (petroleum), hydrotreated light	CAS-No.: 64742-47-8	1 - 5*	Asp. Tox. 1, H304

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Name	Product identifier	%	GHS US classification
1-Hexanol, 2-ethyl-	CAS-No.: 104-76-7	0.5 - 1.5*	Flam. Liq. 4, H227 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Xylene	CAS-No.: 1330-20-7	0.5 - 1.5*	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

## SECTION 4 First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed.

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

Other medical advice or treatment	: Treat symptomatically.
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## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible liquid.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6 Accidental release measures

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

- General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

#### For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapors/spray.

#### For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
- Environmental precautions : Avoid release to the environment.

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

- For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

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

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up.
- Packaging materials : Always store product in container of same material as original container.

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### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

<b>Xylene (1330-20-7)</b>	
<b>USA - ACGIH® - Threshold Limit Values</b>	
Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH® TLV® TWA	20 ppm
Remark (ACGIH®)	TLV® Basis: Eye & URT irr; CNS impair; Hematologic eff; Ototoxicity (p-xylene). Notations: OTO (Ototoxicant) (p isomer); A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2025
<b>USA - ACGIH® - Biological Exposure Indices</b>	
Local name	Xylene, all isomers (Dimethylbenzene)
BEI	0.3 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: End of shift
Remark	Commercial or technical grade xylenes consist of mixtures of isomers and significant amounts of ethyl benzene as indicated under "Properties." Because ethyl benzene is known to reduce the metabolism of xylenes to methylhippuric acids, the BEI applies to technical or commercial grades of xylenes only. The determinants refer to the total of all isomers of methylhippuric acids
Regulatory reference	ACGIH 2025
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL TWA	435 mg/m <sup>3</sup> 100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>USA - Cal/OSHA - Occupational Exposure Limits</b>	
Local name	Xylene; xylol; dimethylbenzene
Cal/OSHA PEL (OEL TWA)	435 mg/m <sup>3</sup> 100 ppm
Cal/OSHA STEL	655 mg/m <sup>3</sup> 150 ppm
Cal/OSHA C	300 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
<b>USA - NIOSH - Occupational Exposure Limits</b>	
Local name	Xylenes (o-, m-, p-isomers)
NIOSH REL 10h TWA	100 ppm
NIOSH REL STEL	150 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

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1-Hexanol, 2-ethyl- (104-76-7)	
USA - ACGIH® - Threshold Limit Values	
Local name	2-Ethyl-1-hexanol
ACGIH® TLV® TWA	5 ppm
Remark (ACGIH®)	TLV® Basis: URT irr & eye irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
[In case of inadequate ventilation] wear respiratory protection.

#### Personal protective equipment symbol(s):



## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Mixture contains one or more component(s) which have the following color(s): Colourless to light yellow Colourless Pure substance: colourless Unpurified: light yellow Pure substance: white Unpurified: yellow to brown
Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Irritating/pungent odour Fruity odour Mild odour Petroleum-like odour Pleasant odour Aromatic odour Sweet odour Characteristic odour Stuffy odour Oil-like odour Tar odour
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available

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Flash point	: 168 °F
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.9
Density	: 7.518 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 21.48 mm <sup>2</sup> /s @ 40 ° C
Explosion limits	: No data available
Particle characteristics	: No data available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

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

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation:dust,mist: Harmful if inhaled.

Cetane Power Booster	
ATE US (oral)	1678.792 mg/kg body weight
ATE US (dust, mist)	4.892 mg/l/4h
2-Ethylhexyl nitrate (27247-96-7)	
LD50 oral rat	> 9600 mg/kg (Rat, Male / female, Experimental value, (maximum achievable concentration), Oral (repeated exposure), 14 day(s))

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<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
LD50 oral	9600 mg/kg
LD50 dermal	4800 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	14 mg/l/4h
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
<b>Xylene (1330-20-7)</b>	
LD50 oral rat	> 4000 mg/kg body weight (Equivalent or similar to EU Method B.1, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 oral	3500 mg/kg
LD50 dermal rabbit	> 4200 mg/kg body weight (4 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LD50 dermal	1700 mg/kg
LC50 Inhalation - Rat	29.09 mg/l (Equivalent or similar to EU Method B.2, 4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat [ppm]	5922 ppm
LC50 Inhalation - Rat (Vapors)	27.57 mg/l/4h
ATE US (oral)	3500 mg/kg body weight
ATE US (dermal)	1700 mg/kg body weight
ATE US (gases)	5922 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
LD50 dermal rabbit	> 5000 mg/kg Source: IUCLID
<b>Distillates (petroleum), hydrotreated light (64742-47-8)</b>	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 oral	15000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.28 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 0,42 -
LC50 Inhalation - Rat (Dust/Mist)	> 5.2 mg/l Source: IUCLID
ATE US (oral)	15000 mg/kg body weight
<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
LD50 oral rat	2047 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))

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<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
LD50 oral	2049 mg/kg
LD50 dermal rat	> 3000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	1970 mg/kg Source: NLM, THOMSON
LD50 dermal	3000 mg/kg
LC50 Inhalation - Rat	0.89 – 5.3 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (mixture of vapour and aerosol), 7 day(s))
LC50 Inhalation - Rat (Vapors)	4.9 mg/l/4h
ATE US (oral)	2047 mg/kg body weight
ATE US (dermal)	1970 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	4.9 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Not classified
<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
pH	No data available in the literature
<b>Xylene (1330-20-7)</b>	
pH	No data available in the literature
<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
pH	7 (0.1 %)
Serious eye damage/irritation	: Not classified
<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
pH	No data available in the literature
<b>Xylene (1330-20-7)</b>	
pH	No data available in the literature
<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
pH	7 (0.1 %)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
<b>Xylene (1330-20-7)</b>	
IARC group	3 - Not classifiable
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
<b>Distillates (petroleum), hydrotreated light (64742-47-8)</b>	
NOAEL (animal/male, F0/P)	≥ 3000 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]
STOT-single exposure	: Not classified
<b>Xylene (1330-20-7)</b>	
STOT-single exposure	May cause drowsiness or dizziness.

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<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
NOAEL (dermal, rat/rabbit, 90 days)	500 mg/kg body weight Animal: rabbit, Guideline: EPA OPP 82-2 (Repeated Dose Dermal Toxicity -21/28 Days)
<b>Xylene (1330-20-7)</b>	
LOAEL (oral, rat, 90 days)	150 mg/kg bw/day
NOAEC (inhalation, rat, gas, 90 days)	> 810 ppm
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
LOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
<b>Distillates (petroleum), hydrotreated light (64742-47-8)</b>	
NOAEL (oral, rat, 90 days)	750 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 495 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
NOAEL (oral, rat, 90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, gas, 90 days)	120 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
<b>Cetane Power Booster</b>	
Viscosity, kinematic	21.48 mm <sup>2</sup> /s @ 40 ° C
<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
Viscosity, kinematic	1.3 mm <sup>2</sup> /s (20 °C)
<b>Xylene (1330-20-7)</b>	
Viscosity, kinematic	0.74 mm <sup>2</sup> /s (20 °C)
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Viscosity, kinematic	18 mm <sup>2</sup> /s
Hydrocarbon	Yes
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
Viscosity, kinematic	No data available in the literature
Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed.

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### SECTION 12 Ecological information

#### 12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

<b>2-Ethylhexyl nitrate (27247-96-7)</b>	
LC50 - Fish [1]	2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 12.6 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 96h - Algae [1]	1.111 mg/l Source: ECOSAR
ErC50 algae	3.22 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

<b>Xylene (1330-20-7)</b>	
LC50 - Fish [1]	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
ErC50 algae	4.4 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
LC50 - Fish [1]	> 5000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l Source: IUCLID
EC50 96h - Algae [1]	> 1000 mg/l Source: IUCLID

<b>1-Hexanol, 2-ethyl- (104-76-7)</b>	
LC50 - Fish [1]	17.1 mg/l (EU Method C.1, 96 h, Leuciscus idus, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	39 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
LC50 - Fish [2]	28.2 mg/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	11.5 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	16.6 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	16.6 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

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### 12.2. Persistence and degradability

Cetane Power Booster	
Persistence and degradability	Not rapidly degradable
2-Ethylhexyl nitrate (27247-96-7)	
Persistence and degradability	Not readily biodegradable in water.
Xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Not rapidly degradable
Distillates (petroleum), hydrotreated light (64742-47-8)	
Persistence and degradability	Not rapidly degradable
1-Hexanol, 2-ethyl- (104-76-7)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia (337367-30-3)	
Persistence and degradability	Not rapidly degradable

### 12.3. Bioaccumulative potential

2-Ethylhexyl nitrate (27247-96-7)	
BCF - Fish [1]	1332 l/kg (OECD 305: Bioconcentration: Flow-Through Fish Test, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow)	5.24 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
Xylene (1330-20-7)	
BCF - Fish [1]	7.2 – 26 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID
Distillates (petroleum), hydrotreated light (64742-47-8)	
Partition coefficient n-octanol/water (Log Pow)	3.3 – 6 Source: IUCLID
1-Hexanol, 2-ethyl- (104-76-7)	
Partition coefficient n-octanol/water (Log Pow)	2.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

2-Ethylhexyl nitrate (27247-96-7)	
Surface tension	No data available in the literature

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2-Ethylhexyl nitrate (27247-96-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.75 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.
Xylene (1330-20-7)	
Surface tension	28.01 – 29.76 mN/m (25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.7 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
1-Hexanol, 2-ethyl- (104-76-7)	
Surface tension	47 mN/m (20 °C, 0.81 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5475 – 2.1177 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

## SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

## SECTION 14 Transport information



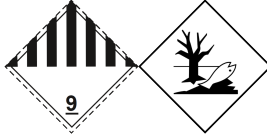
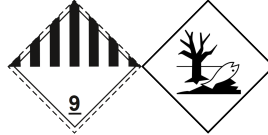
In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
NA1993	UN3082	UN3082	UN3082
14.2. Proper Shipping Name			
Combustible liquid, n.o.s.(Petroleum Distillates) (2-Ethylhexyl nitrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Ethylhexyl nitrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Ethylhexyl nitrate)	Environmentally hazardous substance, liquid, n.o.s. (2-Ethylhexyl nitrate)
14.3. Transport hazard class(es)			
Combustible liquid	9	9	9

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DOT	TDG	IMDG	IATA
			
<b>14.4. Packing group</b>			
III	III	III	III
<b>14.5. Environmental hazards</b>			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available			

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

<b>DOT</b>	
UN-No. (DOT)	: NA1993
DOT Special Provisions (49 CFR 172.102)	: 148 - Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons). IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
<b>TDG</b>	
UN-No. (TDG)	: UN3082

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TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be offered for transport, handled or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means of containment and during transport. (2) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the dangerous goods that could endanger public safety.
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
<b>IMDG</b>	
Special provision (IMDG)	: 274, 335, 375, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A
<b>IATA</b>	
Special provision (IATA)	: A97, A158, A197, A215
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
ERG code (IATA)	: 9L

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### SECTION 15 Regulatory information

#### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia	CAS-No. 337367-30-3	1 - 5*%
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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Xylene	CAS-No. 1330-20-7	0.5 - 1.5*%
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#### Xylene (1330-20-7)

Listed on EPA Hazardous Air Pollutant (HAPS)  
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens  
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	100 lb
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#### 15.2. International regulations

##### CANADA

#### 2-Ethylhexyl nitrate (27247-96-7)

Listed on the Canadian DSL (Domestic Substances List)

#### Xylene (1330-20-7)

Listed on the Canadian DSL (Domestic Substances List)

#### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

#### Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

#### 1-Hexanol, 2-ethyl- (104-76-7)

Listed on the Canadian DSL (Domestic Substances List)

#### 1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia (337367-30-3)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### EU-Regulations

No additional information available

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### National regulations

#### Xylene (1330-20-7)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens  
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)


#### Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 1-Hexanol, 2-ethyl- (104-76-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. State regulations

 **WARNING:** This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 5/8/2026  
Issue date : 4/30/2025

Full text of hazard classes and H-statements	
H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

Safety Data Sheet (SDS), USA

# Cetane Power Booster

## Safety Data Sheet

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.