



## SAFETY DATA SHEET

## Performance Concentrate – Diesel Injector Clean + Cold Flow

Date : 06/15/2014  
Version : 5

## Section 1. Identification

**GHS product identifier** : Performance Concentrate – Diesel Injector Clean + Cold Flow  
**Code** : DFC  
**Product type** : Liquid.

### Identified uses

Diesel Fuel Additive.

**Supplier's details** : AMSOIL INC.  
One AMSOIL Center  
Superior, WI 54880

**Emergency telephone number (with hours of operation)** : CHEMTREC: Within USA and Canada: 1-800-424-9300; Outside USA and Canada: +1 703-741-5970 (collect calls accepted) (24/7)

## 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  
ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
ASPIRATION HAZARD - Category 1  
AQUATIC HAZARD (ACUTE) - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4.8%  
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4.8%

### GHS label elements

#### Hazard pictograms



**Signal word** : Danger

**Hazard statements** : Flammable liquid and vapor.  
Harmful if swallowed or in contact with skin.  
Causes serious eye irritation.  
Causes skin irritation.  
Suspected of causing cancer.  
May be fatal if swallowed and enters airways.  
May cause respiratory irritation.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** : Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**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.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.

**Product code** : DFC

### United States

Ingredient name	%	CAS number
1,2,4-Trimethylbenzene	30 - 60	95-63-6
Trimethylbenzene	30 - 60	25551-13-7
Solvent naphtha, heavy aromatic	10 - 30	64742-94-5
Xylene	5 - 10	1330-20-7
Cumene	1 - 5	98-82-8
2-Ethylhexan-1-ol	1 - 5	104-76-7
2-Butoxyethanol	1 - 5	111-76-2
Mesitylene	1 - 5	108-67-8
1,2,3-Trimethylbenzene	1 - 5	526-73-8
Naphthalene	1 - 5	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** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.

**Ingestion** : Harmful if swallowed. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

#### 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** : Adverse symptoms may include the following:  
nausea or vomiting

#### 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

**Specific hazards arising from the chemical** : Flammable liquid and vapor. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**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.

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## Section 6. Accidental release measures

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### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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## Section 7. Handling and storage

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### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Avoid contact with used product. Do not reuse container.
- 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
1,2,4-Trimethylbenzene	<p><b>ACGIH TLV (United States, 6/2013).</b> TWA: 123 mg/m<sup>3</sup> 8 hours. TWA: 25 ppm 8 hours.</p> <p><b>NIOSH REL (United States, 4/2013).</b> TWA: 125 mg/m<sup>3</sup> 10 hours. TWA: 25 ppm 10 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 25 ppm 8 hours. TWA: 125 mg/m<sup>3</sup> 8 hours.</p>
Trimethylbenzene	<p><b>ACGIH TLV (United States, 6/2013).</b> TWA: 123 mg/m<sup>3</sup> 8 hours. TWA: 25 ppm 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 25 ppm 8 hours. TWA: 125 mg/m<sup>3</sup> 8 hours.</p>
Xylene	<p><b>ACGIH TLV (United States, 6/2013).</b> STEL: 651 mg/m<sup>3</sup> 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 435 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.</p>
Cumene	<p><b>ACGIH TLV (United States, 6/2013).</b> TWA: 50 ppm 8 hours.</p> <p><b>NIOSH REL (United States, 4/2013). Absorbed through skin.</b> TWA: 245 mg/m<sup>3</sup> 10 hours. TWA: 50 ppm 10 hours.</p> <p><b>OSHA PEL (United States, 2/2013). Absorbed through skin.</b> TWA: 245 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.</p>
2-Butoxyethanol	<p><b>ACGIH TLV (United States, 6/2013).</b> TWA: 20 ppm 8 hours.</p> <p><b>NIOSH REL (United States, 4/2013). Absorbed through skin.</b> TWA: 24 mg/m<sup>3</sup> 10 hours. TWA: 5 ppm 10 hours.</p> <p><b>OSHA PEL (United States, 2/2013). Absorbed through skin.</b> TWA: 240 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.</b> TWA: 25 ppm 8 hours. TWA: 120 mg/m<sup>3</sup> 8 hours.</p>
Mesitylene	<p><b>ACGIH TLV (United States, 6/2013).</b> TWA: 123 mg/m<sup>3</sup> 8 hours. TWA: 25 ppm 8 hours.</p> <p><b>NIOSH REL (United States, 4/2013).</b> TWA: 125 mg/m<sup>3</sup> 10 hours.</p>

1,2,3-Trimethylbenzene	<p>TWA: 25 ppm 10 hours.  <b>OSHA PEL 1989 (United States, 3/1989).</b>  TWA: 25 ppm 8 hours.  TWA: 125 mg/m<sup>3</sup> 8 hours.  <b>ACGIH TLV (United States, 6/2013).</b>  TWA: 25 ppm 8 hours.  TWA: 123 mg/m<sup>3</sup> 8 hours.  <b>OSHA PEL 1989 (United States, 3/1989).</b>  TWA: 25 ppm 8 hours.  TWA: 125 mg/m<sup>3</sup> 8 hours.  <b>NIOSH REL (United States, 4/2013).</b>  TWA: 25 ppm 10 hours.  TWA: 125 mg/m<sup>3</sup> 10 hours.</p>
Naphthalene	<p><b>ACGIH TLV (United States, 6/2013). Absorbed through skin.</b>  STEL: 79 mg/m<sup>3</sup> 15 minutes.  STEL: 15 ppm 15 minutes.  TWA: 52 mg/m<sup>3</sup> 8 hours.  TWA: 10 ppm 8 hours.  <b>NIOSH REL (United States, 4/2013).</b>  STEL: 75 mg/m<sup>3</sup> 15 minutes.  STEL: 15 ppm 15 minutes.  TWA: 50 mg/m<sup>3</sup> 10 hours.  TWA: 10 ppm 10 hours.  <b>OSHA PEL (United States, 2/2013).</b>  TWA: 50 mg/m<sup>3</sup> 8 hours.  TWA: 10 ppm 8 hours.</p>

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.



**Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid. [Clear.]  
**Color** : Brown.  
**Odor** : Aromatic hydrocarbon.  
**Odor threshold** : Not available.  
**pH** : Not available.  
**Melting point / Pour point** : -34°C (-29.2°F)  
**Boiling point** : Not available.  
**Flash point** : Closed cup: 48°C (118.4°F) [Pensky-Martens.]  
**Evaporation rate** : Not available.  
**Flammability (solid, gas)** : Not available.  
**Lower and upper explosive (flammable) limits** : Not available.  
**Vapor pressure** : Not available.  
**Vapor density** : Not available.  
**Relative density** : 0.8916  
**Solubility** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : Not available.  
**Viscosity** : Kinematic : 0.048 cm<sup>2</sup>/s (4.8 cSt) (40°C)

## 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.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials and alkalis.



**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
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-
Trimethylbenzene	LD50 Oral	Rat	8970 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
2-Ethylhexan-1-ol	LD50 Dermal	Rabbit	1970 mg/kg	-
	LD50 Oral	Rat	3730 mg/kg	-
2-Butoxyethanol	LC50 Inhalation Vapor	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
Mesitylene	LC50 Inhalation Vapor	Rat	24000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Solvent naphtha, heavy aromatic	Skin - Mild irritant	Rabbit	-	24 hours 500 µL	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
Cumene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
2-Ethylhexan-1-ol	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Moderate irritant	Rabbit	-	20 µg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	415 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
2-Butoxyethanol	Skin - Severe irritant	Rabbit	-	0.5 mL	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Mesitylene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

#### Sensitization

There is no data available.

#### Carcinogenicity

#### Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Xylene	-	3	-	A4	-	-
Cumene	-	2B	-	-	-	-
2-Butoxyethanol	-	3	-	A3	-	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.	A4	-	None.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Cumene	Category 3	Not applicable.	Respiratory tract irritation
2-Ethylhexan-1-ol	Category 3	Not applicable.	Respiratory tract irritation
Mesitylene	Category 3	Not applicable.	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

Name	Result
Solvent naphtha, heavy aromatic Cumene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.
- Ingestion** : Harmful if swallowed. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

- 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** : Adverse symptoms may include the following:  
nausea or vomiting

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

**Long term exposure**

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

**Potential chronic health effects**

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Numerical measures of toxicity****Acute toxicity estimates**

Route	ATE value
Oral	1009.2 mg/kg
Dermal	1932.1 mg/kg
Inhalation (gases)	98977.8 ppm
Inhalation (vapors)	37.64 mg/L

**Section 12. Ecological information****Toxicity**

Product/ingredient name	Result	Species	Exposure
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectenircus - Adult	48 hours
Trimethylbenzene	Acute LC50 22.4 mg/L Fresh water	Fish - Tilapia zillii	96 hours
Xylene	Acute LC50 5600 µg/l Marine water Acute IC50 10 mg/L	Crustaceans - Palaemonetes pugio Algae	48 hours 72 hours
Cumene	Acute LC50 8500 µg/l Marine water Acute LC50 13400 µg/l Fresh water Acute EC50 2600 µg/l Fresh water Acute EC50 11200 µg/l Fresh water Acute LC50 7400 µg/l Fresh water	Crustaceans - Palaemonetes pugio Fish - Pimephales promelas Algae - Pseudokirchneriella subcapitata Daphnia - Daphnia magna - Neonate	48 hours 96 hours 72 hours 48 hours
2-Ethylhexan-1-ol 2-Butoxyethanol	Acute LC50 2700 µg/l Fresh water Acute LC50 28200 µg/l Fresh water Acute EC50 >1000 mg/L Fresh water Acute LC50 1000 mg/L Marine water	Crustaceans - Artemia sp. - Nauplii Fish - Oncorhynchus mykiss Fish - Pimephales promelas Daphnia - Daphnia magna	48 hours 96 hours 96 hours 48 hours
Mesitylene	Acute LC50 1250000 µg/l Marine water Acute LC50 13000 µg/l Marine water Acute LC50 12520 to 15050 µg/l Fresh water	Crustaceans - Chaetogammarus marinus - Young Fish - Menidia beryllina Crustaceans - Cancer magister - Zoea	48 hours 96 hours 48 hours
Naphthalene	Chronic NOEC 400 µg/l Fresh water Acute EC50 1600 µg/l Fresh water Acute LC50 2350 µg/l Marine water Acute LC50 213 µg/l Fresh water Chronic NOEC 0.67 ppm Fresh water	Daphnia - Daphnia magna Daphnia - Daphnia magna - Neonate Crustaceans - Palaemonetes pugio Fish - Melanotaenia fluviatilis - Larvae Fish - Oncorhynchus kisutch	21 days 48 hours 48 hours 96 hours 40 days

**Persistence and degradability**

There is no data available.

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
1,2,4-Trimethylbenzene	3.63	243	low
Trimethylbenzene	3.4 to 3.8	-	low
Solvent naphtha, heavy aromatic	2.8 to 6.5	99 to 5780	high
Xylene	3.12	8.1 to 25.9	low
Cumene	3.55	94.69	low
2-Ethylhexan-1-ol	2.9	25.33	low
2-Butoxyethanol	0.81	-	low
Mesitylene	3.42	161	low
1,2,3-Trimethylbenzene	3.66	194.98	low
Naphthalene	3.4	36.5 to 168	low

**Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

**Mobility** : There is no data available.

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





**Section 13. Disposal considerations**

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**United States - RCRA Toxic hazardous waste "U" List**

Ingredient	CAS #	Status	Reference number
Xylene	1330-20-7	Listed	U239
Cumene	98-82-8	Listed	U055
Naphthalene	91-20-3	Listed	U165

## Section 14. Transport information

	DOT Classification	IMDG	IATA
<b>UN number</b>	UN1268	UN1268	UN1268
<b>UN proper shipping name</b>	PETROLEUM DISTILLATES, N.O.S. (1,2,4-Trimethylbenzene, Trimethylbenzene)	PETROLEUM DISTILLATES, N.O.S. (1,2,4-Trimethylbenzene, Trimethylbenzene)	PETROLEUM DISTILLATES, N.O.S. (1,2,4-Trimethylbenzene, Trimethylbenzene)
<b>Transport hazard class(es)</b>	3 	3  	3 
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	No.	Yes.	No.
<b>Additional information</b>	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.  <b>Reportable quantity</b> 1979.6 lbs / 898.72 kg [266.28 gal / 1008 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

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**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** Benzene; Naphthalene; Toluene; Ethylbenzene  
**Clean Water Act (CWA) 311:** Xylene; Benzene; Naphthalene; Toluene; Ethylbenzene

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

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

**Composition/information on ingredients**

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
1,2,4-Trimethylbenzene	30 - 60	Yes.	No.	No.	Yes.	No.
Trimethylbenzene	30 - 60	Yes.	No.	No.	Yes.	No.
Xylene	5 - 10	Yes.	No.	No.	Yes.	No.
Cumene	1 - 5	Yes.	No.	No.	Yes.	No.
2-Ethylhexan-1-ol	1 - 5	Yes.	No.	No.	Yes.	No.
2-Butoxyethanol	1 - 5	No.	No.	No.	Yes.	No.
Mesitylene	1 - 5	Yes.	No.	No.	Yes.	No.
1,2,3-Trimethylbenzene	1 - 5	Yes.	No.	No.	Yes.	No.
Naphthalene	1 - 5	No.	No.	No.	Yes.	Yes.

**SARA 313**

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	1,2,4-Trimethylbenzene	95-63-6	30 - 60
	Xylene	1330-20-7	5 - 10
	Cumene	98-82-8	1 - 5
	2-Butoxyethanol	111-76-2	1 - 5
	Naphthalene	91-20-3	1 - 5
<b>Supplier notification</b>	1,2,4-Trimethylbenzene	95-63-6	30 - 60
	Xylene	1330-20-7	5 - 10
	Cumene	98-82-8	1 - 5
	2-Butoxyethanol	111-76-2	1 - 5
	Naphthalene	91-20-3	1 - 5

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** : The following components are listed: 1,2,4-Trimethylbenzene; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; Naphthalene; 2-Ethylhexan-1-ol; 2-Butoxyethanol

**New York** : The following components are listed: Xylene; Cumene; Naphthalene

- New Jersey** : The following components are listed: 1,2,4-Trimethylbenzene; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; Naphthalene; 2-Butoxyethanol
- Pennsylvania** : The following components are listed: 1,2,4-Trimethylbenzene; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; Naphthalene; 2-Ethylhexan-1-ol; 2-Butoxyethanol

**California Prop. 65**

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Cumene	Yes.	No.	No.	No.
Naphthalene	Yes.	No.	Yes.	No.
Ethylbenzene	Yes.	No.	41 µg/day (ingestion)	No.
Benzene	Yes.	Yes.	54 µg/day (inhalation)	24 µg/day (ingestion)
Toluene	No.	Yes.	6.4 µg/day (ingestion)	49 µg/day (inhalation)
			13 µg/day (inhalation)	7000 µg/day (ingestion)
			No.	13000 µg/day (inhalation)

**International regulations****Chemical Weapon Convention List Schedules I, II & III Chemicals**

Ingredient name	List name	Status
Not listed.		

**Montreal Protocol (Annexes A, B, C, E)**

Ingredient name	List name	Status
Not listed.		

**Stockholm Convention on Persistent Organic Pollutants**

Ingredient name	List name	Status
Not listed.		

**Rotterdam Convention on Prior Inform Consent (PIC)**

Ingredient name	List name	Status
Not listed.		

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Ingredient name	List name	Status
PAHs	POPs - Annex 3	Listed

**Section 16. Other information****History**

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.