SAFETY DATA SHEET

Diesel Deep Clean Winter Fuel Treatment

Section 1. Identification

Product identifier: Diesel Deep Clean Winter Fuel Treatment

Other means of identification: None.

Product number: 11306, 11307

Recommended use: Diesel fuel treatment

Supplier's details:

Lucas Oil Products, Inc.
3199 Harrison Way NW
Corydon, IN 47112 USA
Toll Free: (800) 342-2512
Tel: (951) 270-0154
Fax: (951) 270-1902
Website: www. LucasOil.com

Emergency telephone number:

ChemTel 24 hrs/day, 365 days/year
1-800-255-3924(USA, Canada, Puerto Rico, US V.I.)
+1-813-248-0585 (International)

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 4
Acute toxicity (oral) - Category 4
Acute toxicity (dermal) - Category 4
Acute toxicity (inhalation) - Category 4
Carcinogenicity - Category 2
Toxic to Reproduction (Unborn child) - Category 2
Specific Target Organ Toxicity (Single Exposure) (Respiratory) - Category 3
Specific Target Organ Toxicity (Single Exposure) (Narcotic) -Category 3
Aspiration Hazard - Category 1

GHS label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

Flammable liquid and vapor.
Harmful if swallowed, in contact with skin or if inhaled.
May be fatal if swallowed and enters airways.
May cause respiratory tract irritation, drowsiness, or dizziness.
Suspected of causing cancer.
Suspected of damaging the unborn child.

Precautionary statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof eletrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Section 2. Hazards identification

Response: IF exposed or concerned: Get medical advice or attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor if you feel unwell. Take off immediately all contaminated clothing. In case of fire, use water spray (fog), foam, dry chemical or CO_2.

Storage: Store in a cool, well-ventilated place. Keep container tightly closed.

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

Additional hazards: When heated above 100°C/212°F may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature.

Very toxic to aquatic life with long lasting effects.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Ingredient name	CAS number	Conc. (% w/w)	GHS Classification
2-Ethylhexyl nitrate	27247-96-7	≥25 - ≤35	Flammable liquid – Cat. 4 Acute toxicity (oral) – Cat. 4 Acute toxicity (dermal) – Cat. 4 Acute toxicity (inhalation) – Cat. 4
Solvent naphtha (petroleum), light aromatic	64742-95-6	≥35 - ≤45	Flammable liquid – Cat. 3 STOT (single exposure) – Cat. 3 (narcotic effects) STOT (single exposure) – Cat. 3 (respiratory tract irritation) Aspiration hazard – Cat. 1
1,2,4-Trimethylbenzene	95-63-6	≥10 - ≤15	Flammable liquid – Cat. 3 Acute toxicity (inhalation) – Cat. 4 Skin Irritation – Cat. 2 Eye Irritation – Cat, 2A STOT (single exposure) – Cat.3 (respiratory tract irritation) Aspiration hazard – Cat. 1
Alkenylacetate olefin copolymer	Proprietary*	≥10 - ≤15	Flammable liquid – Cat. 4
1,3,5-trimethylbenzene (Mesitylene)	108-67-8	≥5 - ≤10	Flammable liquid – Cat. 3 Skin irritation – Cat. 2 Eye irritation – Cat. 2 STOT (single exposure) – Cat. 3 (respiratory tract irritation)
(2-methoxymethylethoxy)propanol	34590-94-8	≥1 - ≤3	Flammable liquid – Cat. 4 STOT (single exposure) – Cat. 3 (respiratory tract irritation)
2-Ethylhexan-1-ol	104-76-7	≥1 - ≤3	Flammable liquid – Cat. 4 Acute toxicity (inhalation) – Cat. 4 Skin Irritation – Cat. 2 Eye Irritation – Cat. 2A STOT (single exposure) – Cat. 3 (respiratory tract irritation)
Xylene	1330-20-7	≥1 - ≤3	Flammable liquid – Cat. 3 Acute toxicity (dermal) – Cat. 4 Acute toxicity (inhalation) – Cat. 4 Skin irritation – Cat. 2 Eye irritation – Cat. 2

Section 3. Composition/information on ingredients

Xylene (continued)	1330-20-7		STOT (single exposure) – Cat. 3 (respiratory tract irritation) STOT (repeated exposure) Cat. 2 Aspiration hazard – Cat. 1
1,2,3-Trimethylbenzene	526-73-8	≥1 - ≤2.7	Flammable liquid – Cat. 3 Skin irritation – Cat. 2 Eye irritation – Cat. 2A STOT (single exposure) – Cat. 3 (respiratory tract irritation) STOT (single exposure) – Cat. 3 (narcotic effects) Aspiration hazard – Cat. 1
Cumene	98-82-8	≥1 - ≤3	Flammable liquid – Cat. 3 Carcinogenicity – Cat. 2 STOT (single exposure) – Cat. 3 (respiratory tract irritation) Aspiration hazard – Cat. 1
Cymene	25155-15-1	≥0.5 - <1	Flammable liquid – Cat. 3 Acute toxicity (inhalation) – Cat. 3 Skin irritation – Cat. 2 Eye irritation – Cat. 2A Toxic to reproduction – Cat. 2 Aspiration hazard – Cat. 1
Methyl-1H-benzotriazole	29385-43-1	≥0.1 - ≤0.3	Acute toxicity (oral) – Cat. 4 Toxic to reproduction – Cat. 2

* Proprietary HMIRA registration #3502293, exemption granted: 10/2/2023

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 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 for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation: If inhaled, remove to fresh air. 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. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen.

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. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 15 minutes.

Section 4. First aid measures

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Harmful in contact with skin.

Ingestion : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact: No specific data.

Inhalation: Adverse symptoms may include the following:
Inhalation of vapors may cause a sharp decrease in blood pressure with resulting loss of consciousness, respiratory tract, irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations.

Skin contact: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations.
Overexposure to organic nitrates by inhalation of vapor or skin contact may cause headache, dizziness, nausea, and decreased blood pressure.

Ingestion: Adverse symptoms may include the following: nausea or vomiting, reduced fetal weight, increase in fetal deaths, skeletal malformations.

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

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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: In case of fire, use water spray (fog), foam, dry chemical or CO_2.

Unsuitable extinguishing media: Do not use water jet.

Specific hazards arising from the chemical: Flammable liquid and vapor. Risk of explosion if heated under confinement. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. 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, nitrogen oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fight fire from protected location or maximum possible distance.

Do not fight fire when it reaches the material. Withdraw from fire and let it burn.

When heated above 100°C/212°F may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature. Spray storage vessels with water to maintain temperature below 100°C/212°F.

Special protective equipment for firefighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. 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 specialized 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.

Methods and materials for containment and cleaning up

Small spills: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large 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 of 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. Do not reuse container.

Do not heat this product.

Product transfer:

Prior to starting transfer pump, ensure all valves in the product discharge line are open and that the line is unobstructed. Immediately after starting the transfer pump, verify that the product is flowing. If product is not flowing, shut the pump off immediately. Operating the transfer pump in a dead-headed (blocked) condition without product flow can result in an explosion damaging equipment and causing personal injury. A pneumatic driven diaphragm pump or pumps of other designs equipped with high temperature (75°C) shut-off devices are recommended when pumps are provided at fixed locations.

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. Do not heat the product. Warehouses equipped with fire suppression systems are recommended. This product should not be stored in the same area with tanks containing flammable liquids. Fire suppression systems should be adequate to keep product cool in the event of a fire.

Section 8. Exposure controls/personal protection

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

Control parameters

Occupational exposure limits:

Ingredient name	Exposure limits
1,2,4-Trimethylbenzene	**ACGIH TLV (United States, 1/2022).** TWA: 10 ppm 8 hours.
Mesitylene	**ACGIH TLV (United States, 1/2022). [trimethyl benzene, isomers]** TWA: 10 ppm 8 hours. TWA: 123 mg/m³ 8 hours.
(2-methoxymethylethoxy)propanol	**ACGIH TLV (United States, 1/2022). [(2-Methoxymethylethoxy)propanol] Absorbed through skin.** TWA: 606 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 909 mg/m³ 15 minutes. **OSHA PEL (United States, 5/2018). Absorbed through skin.** TWA: 100 ppm 8 hours. TWA: 600 mg/m³ 8 hours. **ACGIH TLV (United States, 1/2022). [dipropylene glycol methyl ether]** TWA: 50 ppm 8 hours.
Xylene	**ACGIH TLV (United States, 1/2022). [xylene]** TWA: 20 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 651 mg/m³ 15 minutes. **OSHA PEL (United States, 5/2018). [Xylenes]** TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.
1,2,3-Trimethylbenzene	**ACGIH TLV (United States, 1/2022). [trimethyl benzene, isomers]** TWA: 10 ppm 8 hours. TWA: 123 mg/m³ 8 hours.
Cumene	**ACGIH TLV (United States, 1/2022).** TWA: 5 ppm 8 hours. **OSHA PEL (United States, 5/2018). Absorbed through skin.** TWA: 50 ppm 8 hours. TWA: 245 mg/m³ 8 hours.

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. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

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: safety glasses with side-shields.

Skin protection

Hand protection: Wear chemical resistant gloves. Nitrile gloves of minimum thickness 0.4 mm have an expected breakthrough time of 30 minutes or less when in frequent contact with the product. Due to variable exposure conditions the user must consider that the practical use of a chemical-protective glove in practice may be much shorter than the permeation time above. Manufacturer's directions for use, especially about the minimum thickness and the minimum breakthrough time, must be observed. This information does not replace suitability tests by the end user since glove protection varies depending on the conditions under which the product is used.

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 glove.

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: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance	
Physical state:	Liquid.
Color:	Amber, clear.
Odor:	Not available.
pH:	Not applicable.
Melting point:	Not available.
Boiling point:	Not available.
Flash point:	46° C (114.8°F) Pensky-Martens Closed Cup
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Lower & upper explosive limits:	Not available.
Vapor pressure:	Not available.
Vapor density:	Not available.
Relative density:	0.9212
Solubility:	Immiscible in water.
Partition coeffient n-octanol/water:	Not applicable.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Kinematic viscosity:	6.1 cSt @ 40°C (104°F)
Explosive properties:	Not available.
Oxidizing properties:	Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Unstable at temperatures greater than 100°C/212°F.

Possibility of hazardous reactions: Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: heating under confinement. Reactions may include the following: risk of explosion

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

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	Test method	Result	Species	Dose	Exposure	Remarks
Solvent naphtha (petroleum), light aromatic	403 Acute Inhalation toxicity	LC_{50} Inhalation (vapor)	Rat	>6193 mg/m³	4 hours	-
	402 Acute Dermal toxicity	LD_{50} Dermal	Rabbit	>3160 mg/kg	-	-
	not available	LD_{50} Oral	Rat, female	3492 mg/kg	-	-
	not available	LD_{50} Oral	Rat, male	6984 mg/kg	-	-
2-Ethylhexyl nitrate	not available	LC_{50} Inhalation (vapor)	Rat	>4.6 mg/l	1 hour	-
	not available	LD_{50} Dermal	Rabbit	>4800 mg/kg	-	-
	not available	LD_{50} Oral	Rat	>9600 mg/kg	-	-
1,2,4-Trimethylbenzene	not available	LC_{50} Inhalation (vapor)	Rat	>10200 mg/m³	4 hours	Based on data for a similar substance.
	not available	LD_{50} Dermal	Rat	>3440 mg/kg	-	Based on data for a similar substance.
	not available	LD_{50} Oral	Rat	6000 mg/kg	-	-
Alkenylacetate olefin copolymer	401 Acute Oral toxicity	LD_{50} Oral	Rat	>2000 mg/kg	-	Based on data for a similar substance.
Mesitylene	not available	LC_{50} Inhalation (vapor)	Rat	>10.2 mg/l	4 hours	Based on data for a similar substance.
	not available	LD_{50} Dermal	Rat	>3440 mg/kg	-	Based on data for a similar substance.
	not available	LD_{50} Oral	Rat	>5000 mg/kg	-	-
(2-methoxymethylethoxy) propanol	402 Acute Dermal toxicity	LD_{50} Dermal	Rabbit	9510 mg/kg	-	-
2-Ethylhexanol	403 Acute Inhalation toxicity	LC_{50} Inhalation (dust/mist)	Rat	1 to 5.3 mg/l	4 hours	-
	not available	LC_{50} Inhalation (vapor)	Rat	>0.89 mg/l	4 hours	-
	not available	LD_{50} Dermal	Rat	1970 mg/kg	-	WOE does not support classification
	401 Acute Oral toxicity	LD_{50} Oral	Rat	2047 mg/kg	-	-

Section 11. Toxicological information

Product/ingredient name	Test method	Result	Species	Dose	Exposure	Remarks
Xylene	403 Acute Inhalation toxicity	LC_{50} Inhalation (vapor)	Rat	29 mg/l	4 hours	-
	not available	LD_{50} Dermal	Rabbit	12126 mg/kg	-	Based on data for a similar substance.
	not available	LD_{50} Oral	Rat, male	3523 mg/kg	-	-
1,2,3-Trimethylbenzene	not available	LC_{50} Inhalation (vapor)	Rat	24 mg/l	4 hours	-
	not available	LD_{50} Oral	Rat	5000 mg/kg	-	-
Cumene	not available	LD_{50} Dermal	Rabbit	>10000 mg/kg	-	-
	not available	LD_{50} Oral	Rat	2260 mg/kg	-	-
Cymene	not available	LD_{50} Dermal	Rabbit	>5000 mg/kg	-	Based on data for a similar substance.
	not available	LD_{50} Oral	Rat	4750 mg/kg	-	Based on data for a similar substance.
Methyl-1H-benzotriazole	not available	LC_{50} Inhalation (vapor)	Rat	>1730 mg/m³	1 hours	-
	402 Acute Dermal toxicity	LD_{50} Dermal	Rabbit	>2000 mg/kg	-	Based on data for a similar substance.
	401 Acute Oral toxicity	LD_{50} Oral	Rat	720 mg/kg	-	-

Conclusion/Summary : Harmful if swallowed, in contact with skin or if inhaled.

Irritation/Corrosion

Product/ingredient name	Test method	Species	Result	Remarks
Solvent naphtha (petroleum), light aromatic	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Not an Irritant	-
	not available	Rabbit	Skin - Mild irritant	-
2-Ethylhexyl nitrate	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Not an Irritant	-
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Not an Irritant	-
1,2,4-Trimethylbenzene	not available	Rabbit	Skin - Irritant	Based on data for a similar substance.
Alkenylacetate olefin copolymer	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Not an Irritant	Based on data for a similar substance.
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Not an Irritant	Based on data for a similar substance.
Mesitylene	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Irritant	Based on data for a similar substance.
	not available	Rabbit	Skin - Irritant	-
(2-methoxymethylethoxy) propanol	not available	Rabbit	Eyes - Not an Irritant	-
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Not an Irritant	-
2-Ethylhexanol	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Irritant	-
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Irritant	-
Xylene	not available	Rabbit	Eyes - Irritant	-
	not available	Rabbit	Skin - Irritant	-
Cumene	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Not an Irritant	-
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Not an Irritant	-

Section 11. Toxicological information

Cymene	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Irritant	Based on data for a similar substance.
	not available	Rabbit	Skin - Irritant	Based on data for a similar substance.
Methyl-1H-benzotriazole	405 Acute Eye irritation/corrosion	Rabbit	Eyes - Not an Irritant	-
	404 Acute Dermal irritation/corrosion	Rabbit	Skin - Not an Irritant	-

Conclusion/Summary

Skin : Causes mild skin irritation.

Eyes : Not an irritant.

Respiratory : May cause respiratory irritation.

Sensitization

Product/ingredient name	Test method	Route of exposure	Species	Result	Remarks
Solvent naphtha (petroleum), light aromatic	406 Skin sensitization	skin	Guinea pig	Not sensitizing	-
2-Ethylhexyl nitrate	406 Skin sensitization	skin	Guinea pig	Not sensitizing	-
1,2,4-Trimethylbenzene	406 Skin sensitization	skin	Guinea pig	Not sensitizing	Based on data for a similar substance.
Mesitylene	406 Skin sensitization	skin	Guinea pig	Not sensitizing	Based on data for a similar substance.
Xylene	429 Skin sensitization: local lymph node assay	skin	Mouse	Not sensitizing	-
Cumene	406 Skin sensitization	skin	Guinea pig	Not sensitizing	-
Cymene	not available	skin	Guinea pig	Not sensitizing	Based on data for a similar substance.
Methyl-1H-benzotriazole	406 Skin sensitization	skin	Guinea pig	Not sensitizing	-

Conclusion/Summary

Skin : Not sensitizing.

Respiratory : Not sensitizing.

Mutagenicity

Product/ingredient name	Test method	Experiment / Subject	Result	Remarks
2-Ethylhexyl nitrate	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	-
	473 Mammalian Chromosomal Aberration	In vitro / Mammal, human	Negative	-
Solvent naphtha (petroleum), light aromatic	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	-
1,2,4-Trimethylbenzene	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	Based on data for a similar substance.
Mesitylene	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	Based on data for a similar substance.
(2-methoxymethylethoxy) propanol	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	Based on data for a similar substance.
2-Ethylhexanol	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	473 Mammalian Chromosomal Aberration	In vitro / Mammal, human	Negative	-

Section 11. Toxicological information

Xylene	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	not available	In vitro / Mammal, animal	Negative	-
1,2,3-Trimethylbenzene	not available	In vitro / Bacteria	Positive	WOE does not support classification.
	not available	In vitro / Bacteria	Negative	-
	not available	In vitro / Mammal, animal	Equivocal	-
	not available	In vivo / Mammal, animal	Positive	WOE does not support classification.
	not available	In vivo / Mammal, animal	Negative	-
Cumene	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	not available	In vitro / Mammal, animal	Negative	-
	474 Mammalian Erythrocyte Micronucleus	In vivo / Mammal, animal	Equivocal	-
Cymene	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	Based on data for a similar substance.
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	Based on data for a similar substance.
	473 Mammalian Chromosomal Aberration	In vitro / Mammal, human	Negative	Based on data for a similar substance.
Methyl-1H-benzotriazole	471 Bacterial Reverse Mutation	In vitro / Bacteria	Negative	-
	476 Mammalian Cell Gene Mutation	In vitro / Mammal, animal	Negative	Based on data for a similar substance.

Conclusion/Summary : Not mutagenic.

Carcinogenicity

Product/ingredient name	Test method	Species	Exposure	Result	Remarks
Solvent naphtha (petroleum),light aromatic	451 Carcinogenicity studies	Rat	113 months, 5 days/week	Negative, Inhalation NOAEL	-
(2-methoxymethylethoxy) propanol	453 Combined Chronic Toxicity/Carcinogenicity studies	Rat	24 months	Negative, Inhalation NOAEL	Based on data for a similar substance.
2-Ethylhexanol	451 Carcinogenicity studies	Mouse	18 months, 5 days/week	Negative, Oral NOAEL	-
	451 Carcinogenicity studies	Rat	24 months, 5 days/week	Negative, Oral NOAEL	-
Xylene	not available	Rat	103 weeks, 5 days/week	Negative, Oral NOAEL	-
Cumene	451 Carcinogenicity studies	Rat	105 weeks, 6 hours/day	Positive, Inhalation TC	-

Conclusion/Summary : Suspected of causing cancer.

Classification

Product/ingredient name	OSHA	IARC	NTP
Xylene	-	3	-
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Section 11. Toxicological information

Reproductive toxicity

Product/ingredient name	Test method	Route of exposure	Species	Maternal toxicity	Fertility	Development toxin	Remarks
Solvent naphtha (petroleum), light aromatic	not available	inhalation	rat	negative	negative	negative	-
2-Ethylhexyl nitrate	421 Reproduction/ Developmental toxicity screening	oral	rat	negative	negative	negative	-
1,2,4-Trimethylbenzene	416 Two-Generation Reproduction toxicity	inhalation	rat	positive	negative	negative	Based on data for a similar substance
Alkenylacetate olefin copolymer	421 Reproduction/ Developmental toxicity screening	oral	rat	negative	negative	negative	Based on data for a similar substance
Mesitylene	416 Two-Generation Reproduction toxicity	inhalation	rat	positive	negative	negative	Based on data for a similar substance
(2-methoxymethylethoxy) propanol	416 Two-Generation Reproduction toxicity	inhalation	rat	positive	negative	negative	Based on data for a similar substance
2-Ethylhexanol	416 Two-Generation Reproduction toxicity	oral	rat	negative	negative	negative	-
Xylene	not available	inhalation	rat, male	positive	equivocal	negative	WOE does not support classification.
1,2,3-Trimethylbenzene	not available	inhalation	rat	-	equivocal	equivocal	-
Cumene	413 Subchronic (90day) Inhalation toxicity	inhalation	rat	positive	negative	negative	-
Cymene	422 Combined Repeated Dose toxicity, with Reproductive/ Developmental screening	oral	rat	positive	positive	positive	Based on data for a similar substance

Conclusion/Summary : Suspected of damaging fertility or the unborn child.

Section 11. Toxicological information

Teratogenicity

Product/ingredient name	Test method	Route of exposure	Species	Result	Remarks
Solvent naphtha (petroleum), light aromatic	not available	inhalation	rabbit	negative	Based on data for a similar substance.
	not available	inhalation	rat	negative	Based on data for a similar substance.
2-Ethylhexyl nitrate	414 Prenatal Developmental toxicity	inhalation	rat	negative	Based on data for a similar substance.
	not available	oral	rat	negative	Based on data for a similar substance.
	not available	oral	rat	negative	Based on data for a similar substance.
1,2,4-Trimethylbenzene	414 Prenatal Developmental toxicity	inhalation	rat	negative	-
Mesitylene	414 Prenatal Developmental toxicity	inhalation	rat	negative	-
(2-methoxymethylethoxy) propanol	not available	inhalation	rat	negative	-
2-Ethylhexanol	414 Prenatal Developmental toxicity	oral	mouse	negative	-
	414 Prenatal Developmental toxicity	dermal	rat	negative	-
	414 Prenatal Developmental toxicity	inhalation	rat	negative	-
Xylene	414 Prenatal Developmental toxicity	inhalation	rat	negative	-
1,2,3-Trimethylbenzene	not available	inhalation	rat	equivocal	Based on data for a similar substance.
Cumene	414 Prenatal Developmental toxicity	inhalation	rat	negative	-
	414 Prenatal Developmental toxicity	inhalation	rabbit	negative	-
Methyl-1H-benzotriazole	414 Prenatal Developmental toxicity	oral	rat	positive	-

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Target organs/effect
Solvent naphtha (petroleum), light aromatic	Category 3	Narcotic effects, Respiratory tract irritation
2-Ethylhexanol	Category 3	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	Respiratory tract irritation
Mesitylene	Category 3	Respiratory tract irritation
(2-methoxymethylethoxy) propanol	Category 3	Respiratory tract irritation
Xylene	Category 3	Respiratory tract irritation
1,2,3-Trimethylbenzene	Category 3	Narcotic effects, Respiratory tract irritation
Cumene	Category 3	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Category 2: Xylene

Aspiration hazard

Category 1: Solvent naphtha (petroleum), light aromatic; 1,2,4-Trimethylbenzene; Mesitylene; Xylene; 1,2,3-Trimethylbenzene; Cumene; Cymene

Information on the likely routes of exposure: Eyes, Skin, Ingestion, Inhalation

Section 11. Toxicological information

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Harmful in contact with skin.

Ingestion : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:
Inhalation of vapors may cause a sharp decrease in blood pressure with resulting loss of consciousness.
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
Overexposure to organic nitrates by inhalation of vapor or skin contact may cause headache, dizziness, nausea, and decreased blood pressure.

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

Short term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Section 11. Toxicological information

Potential chronic health effects

Product/ingredient name	Test method	Species	Dose	Exposure	Result	Remarks
2-Ethylhexyl nitrate	not available	Rabbit	500 mg/kg	-	Sub-acute, NOAEL	Dermal
	413 Subchronic Inhalation toxicity	Rat	863 mg/m³	90 day	Sub-chronic, NOAEL (vapor)	Based on data for a similar substance.
Solvent naphtha (petroleum), light aromatic	408 Repeated Dose Oral toxicity	Rat	300 mg/kg	90 day	Sub-chronic, NOAEL	Based on data for a similar substance.
	452 Chronic Inhalation toxicity	Rat	900 mg/m³	12 month	NOAEL (vapor)	Based on data for a similar substance.
	413 Subchronic Inhalation toxicity	Rat	0.38 mg/l	90 day	NOAEL (vapor)	-
2-Ethylhexanol	408 Repeated Dose Oral toxicity	Rat	250 mg/kg	90 day	Sub-chronic, NOAEL	-
	413 Subchronic Inhalation toxicity	Rat	640 mg/m³	90 day	NOAEL (vapor)	-
	408 Repeated Dose Oral toxicity	Rat	125 mg/kg	90 day	Sub-chronic, NOAEL	
1,2,4-trimethylbenzene	408 Repeated Dose Oral toxicity	Rat	600 mg/kg	90 day	Sub-chronic, NOAEL	Based on data for a similar substance.
	452 Chronic Inhalation toxicity	Rat	1800 mg/ m³	12 month	NOAEL (vapor)	Based on data for a similar substance.
Alkenylacetate olefin copolymer	not available	Rat	8000 mg/kg	-	Sub-chronic, NOAEL	Oral. Based on data for a similar substance.
Mesitylene	408 Repeated Dose Oral toxicity	Rat	600 mg/kg	90 day	Sub-chronic, NOAEL	-
	413 Subchronic Inhalation toxicity	Rat	1.23 mg/l	90 day	NOAEL (vapor)	Based on data for a similar substance.
(2-methoxymethylethoxy) propanol	411 Subchronic Dermal toxicity	Rat	2850 mg/kg	90 day	NOAEL	-
	not available	Rat	1000 mg/kg	-	NOAEL	Oral
	413 Subchronic Inhalation toxicity	Rat	1212 mg/ m³	90 day	NOAEL (vapor)	-
Xylene	408 Repeated Dose Oral toxicity	Rat	150 mg/kg	90 day	Sub-chronic, NOAEL	-
	not available	Rat	3.5 mg/l	13 week	Sub-chronic, NOAEL (vapor)	Inhalation
1,2,3-trimethylbenzene	not available	Rat	25 ppm	28 day	Sub-acute, LOAEL (vapor)	Inhalation
	not available	Rat	30 mg/kg	28 day	Sub-acute, NOAEL	Oral
	not available	Rat	123 mg/m³	13 week	Sub-chronic, NOAEL (vapor)	Inhalation
Cumene	not available	Rat	535.8 mg/kg	-	Sub-acute, NOAEL	Oral
	413 Subchronic Inhalation toxicity	Rat	125 ppm	90 day	Sub-chronic, NOAEL (vapor)	Inhalation

Section 11. Toxicological information

Methyl-1H-benzotriazole	407 Repeated Dose Oral toxicity	Rat	150 mg/kg	28 day	Sub-acute, NOAEL	Oral
Cymene	422 Combined Repeated Dose toxicity with Reproductive/ Developmental screening	Rat	50 mg/kg	-	Sub-acute, NOAEL	Oral. Based on data for a similar substance.
	not available	Rat	1.23 mg/l	28 day, 6 hours/day	Sub-acute, NOAEL (vapor)	Inhalation, based on data for a similar substance.

Conclusion/Summary : Not available.

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 : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	Remarks
Solvent naphtha (petroleum), light aromatic	Acute EL50 3.1 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Acute EL50 4.5 mg/l	Daphnia magna	48 hours	Based on data for a similar substance.
	Acute LL50 8.2 mg/l	Fish - Pimephales promelas	96 hours	Based on data for a similar substance.
	Chronic NOEC 0.4 mg/l	Daphnia magna	21 days	Based on data for a similar substance.
	Chronic NOEL 0.5 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Chronic NOEL 2.6 mg/l	Fish - Pimephales promelas	14 days	Based on data for a similar substance.
2-Ethylhexyl nitrate	Acute EC50 >2.53 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Acute EC50 0.83 mg/l	Daphnia magna	48 hours	-
	Acute EL50 >1000 mg/l	Micro-organism	3 hours	-
	Acute LC50 2 mg/l	Fish - Danio rerio	96 hours	-
	Chronic EC10 2.22 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
1,2,4-Trimethylbenzene	Acute LC50 3.6 mg/l	Daphnia magna	48 hours	-
	Acute LC50 7.72 mg/l	Fish - Pimephales promelas	96 hours	-
Alkenylacetate olefin copolymer	Acute EC50 12.7 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	Based on data for a similar substance.
	Acute EC50 12.6 mg/l	Daphnia magna	48 hours	Based on data for a similar substance.
	Chronic NOEC 5.96 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	Based on data for a similar substance.
	Chronic NOEC 0.551 mg/l	Fish - Pimephales promelas	34 days	Based on data for a similar substance.

Section 12. Ecological information

Mesitylene	Acute EC50 53 mg/l	Algae – Desmodesmus subspicatus	48 hours	-
	Acute LC50 6 mg/l	Daphnia magna	48 hours	-
	Acute LC50 12.52 mg/l	Fish - Carassius auratus	96 hours	-
	Chronic EC10 16 mg/l	Algae – Desmodesmus subspicatus	48 hours	-
	Chronic NOEC 0.4 mg/l	Daphnia magna	21 days	-
(2-methoxymethylethoxy) propanol	Acute EC50 >969 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Acute EL10 4168 mg/l	Micro-organism	18 hours	-
	Acute EL50 1919 mg/l	Daphnia magna	48 hours	-
	Acute LL50 >1000 mg/l	Fish - Poecilia reticulata	96 hours	-
	Chronic NOEC 969 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Chronic NOEL ≥0.5 mg/l	Daphnia magna	22 days	-
2-Ethylhexanol	Acute EC50 39 mg/l	Daphnia magna	48 hours	-
	Acute EL50 16.6 mg/l	Algae – Desmodesmus subspicatus	72 hours	-
	Acute LC50 17.1 mg/l	Fish - Leuciscus idus melanotus	96 hours	-
	Chronic EL10 5.3 mg/	Algae – Desmodesmus subspicatus	72 hours	-
Methyl-1H-benzotriazole	Acute EL50 75 mg/l, freshwater	Algae – Pseudokirchneriella subcapitata	72 hours	Based on data for a similar substance.
	Acute EL50 8.58 mg/l, freshwater	Daphnia galeata	48 hours	Based on data for a similar substance.
	Acute EL50 1060 mg/l	Micro-organism	24 hours	Based on data for a similar substance.
	Acute LL50 180 mg/l, freshwater	Fish - Danio rerio	96 hours	Based on data for a similar substance.
	Chronic EL10 1.18 mg/l, freshwater	Algae – Desmodesmus subspicatus	72 hours	Based on data for a similar substance.
	Chronic EL10 0.4 mg/l, freshwater	Daphnia galeata	21 days	Based on data for a similar substance.
Xylene	EL50 >157 mg/l	Micro-organism	3 hours	Based on data for a similar substance.
	Acute EC50 4.36 mg/l	Algae – Pseudokirchneriella subcapitata	73 hours	Based on data for a similar substance.
	Acute EC50 >3.4 mg/	Crustaceans – Ceriodaphnia dubia	48 hours	Based on data for a similar substance.
	Acute LC50 2.6 mg/l	Fish - Oncorhynchus mykiss	96 hours	Based on data for a similar substance.
	Chronic EC10 1.9 mg/l	Algae – Pseudokirchneriella subcapitata	73 hours	Based on data for a similar substance.
	Chronic EC10 1.91 mg/l	Daphnia magna	21 days	Based on data for a similar substance.
	Chronic NOEC >1.3 mg/l	Fish - Oncorhynchus mykiss	56 days	-
1,2,3-trimethylbenzene	Acute EC50 4.4 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
	Acute EC50 2.7 mg/l	Daphnia magna	48 hours	-
	Acute LC50 7.8 mg/l	Fish - Oryzias latipes	96 hours	-
	Chronic NOEC 1.9 mg/l	Algae – Pseudokirchneriella subcapitata	72 hours	-
Cumene	EC50 >2000 mg/l	Micro-organism	3 hours	-
	Acute EC50 2.01 mg/l	Algae – Desmodesmus subspicatus	72 hours	-
	Acute EC50 2.14 mg/l	Crustaceans - Daphnia magna	48 hours	-
	Acute EC50 10.6 mg/l, freshwater	Daphnia - Daphnia magna, neonate	48 hours	-
	Acute LC50 4.8 mg/l	Fish - Oncorhynchus mykiss	96 hours	-
	Chronic EC10 1.35 mg/l	Algae – Desmodesmus subspicatus	72 hours	-
	Chronic NOEC 0.35 mg/l	Daphnia magna	21 days	QSAR result.
	Chronic NOEC 0.38 mg/l	Fish - D. rerio and P. promelas	28 days	QSAR result.

Section 12. Ecological information

Cymene	Acute EC50 5.8 mg/l	Algae	72 hours	Based upon data for a similar substance.
	Acute EC50 1.9 mg/l	Daphnia magna	48 hours	Based upon data for a similar substance.
	Acute LC50 2 mg/l	Fish	96 hours	Based upon data for a similar substance.
	Chronic NOEC 0.48 mg/l	Algae	72 hours	Based upon data for a similar substance.
	Chronic NOEC 0.46 mg/l	Daphnia - Daphnia magna	21 days	Based upon data for a similar substance.
	Chronic NOEC 0.69 mg/l	Fish	-	Based upon data for a similar substance.

Conclusion/Summary : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Product/ingredient name	Test	Result	Remarks
2-ethylhexyl nitrate	OECD 310 Ready Biodegradability – CO2 in Sealed Vessels (headspace test)	0 % - Not readily - 28 days	-
Alkenylacetate olefin copolymer	OECD 301C Ready Biodegradability – Modified MITI	82 to 98 % - Readily - 14 days	Based on data for a similar substance.
Mesitylene	-	42 % - Not readily - 28 days	-
2-Ethylhexanol	OECD 301C Ready Biodegradability – Modified MITI	100 % - Readily - 14 days	-
(2-methoxymethylethoxy) propanol	OECD 301F Ready Biodegradability – Manometric Respirometry	76 % - Readily - 28 days	-
Xylene	OECD 301F Ready Biodegradability – Manometric Respirometry	87.8 % - Readily - 28 days	Based on data for a similar substance.
1,2,3-Trimethylbenzene	-	42 % - Not readily - 28 days	Based on data for a similar substance.
Methyl-1H-benzotriazole	OECD 301F Ready Biodegradability – Manometric Respirometry	4 % - Not readily - 28 days	-
Cumene	-	70 % - Readily - 20 days	-

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2-Ethylhexyl nitrate	5.24	1196	high
Solvent naphtha (petroleum),light aromatic	-	10 to 2500	high
1,2,4-Trimethylbenzene	3.63	243	low
2-Ethylhexanol	2.9	25.33	low
Mesitylene	3.42	161	low
(2-methoxymethylethoxy) propanol	0.004	-	low
Xylene	3.12	8.1 to 25.9	low
1,2,3-Trimethylbenzene	3.66	194.98	low
Cumene	3.55	35.48	low
methyl-1H-benzotriazole	1.081	-	low
Cymene	4.1	-	high

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 at all times 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 emptied 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.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	NA1993	UN1993	UN1993	UN1993
UN proper shipping name	Combustible liquid, n. o.s. (2-ethylhexyl nitrate, Solvent naphtha) Marine pollutant	FLAMMABLE LIQUID, N.O.S. (Solvent naphtha, 2-ethylhexyl nitrate). Marine pollutant	FLAMMABLE LIQUID, N.O.S. (Solvent naphtha, 2-ethylhexyl nitrate). Marine pollutant	FLAMMABLE LIQUID, N.O.S. (Solvent naphtha, 2-ethylhexyl nitrate).
Transport hazard class(es)	Combustible liquid. 	3 	3 	3 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

Additional information: The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions.

Section 15. Regulatory information

U.S. Federal regulations

United States - TSCA Section 5

TSCA 5(a)2 final significant new use rules

None of the components are listed.

TSCA 5(a)2 proposed significant new use rules

None of the components are listed.

TSCA 5(e) substance consent order

Alkenyl succinimide P-08-0069

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	**%**	**EHS**	**(lbs)**	**(gallons)**	**(lbs)**	**(gallons)**
nitric acid	≤0.01	Yes.	1000	85.7	1000	85.7
vinyl acetate	<0.1	Yes.	1000	129	5000	644.8

Section 15. Regulatory information

U.S. Federal regulations

United States - TSCA Section 5

TSCA 5(a)2 final significant new use rules

None of the components are listed.

TSCA 5(a)2 proposed significant new use rules

None of the components are listed.

TSCA 5(e) substance consent order

Alkenyl succinimide P-08-0069

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	**%**	**EHS**	**(lbs)**	**(gallons)**	**(lbs)**	**(gallons)**
nitric acid	≤0.01	Yes.	1000	85.7	1000	85.7

CERCLA : CERCLA: Hazardous substances.: naphthalene: 100 lbs. (45.4 kg); ethylbenzene: 1000 lbs. (454 kg); toluene: 1000 lbs. (454 kg); benzene: 10 lbs. (4.54 kg); xylene: 100 lbs. (45.4 kg); vinyl acetate: 5000 lbs. (2270 kg); cumene: 5000 lbs. (2270 kg); phenanthrene: 5000 lbs. (2270 kg); nitric acid: 1000 lbs. (454 kg)

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1,2,4-Trimethylbenzene Xylene Cumene	95-63-6 1330-20-7 98-82-8	≥10 - ≤15 ≥1 - ≤3 ≥1 - ≤3

State - 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. www.P65Warnings.ca.gov

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Cumene	≥1 - ≤3	Yes.	No.	-	-
Ethylbenzene	<0.1	Yes.	No.	Yes.	-
Naphthalene	<0.1	Yes.	No.	Yes.	-
Benzene	<0.1	Yes.	Yes.	Yes.	Yes.
Toluene	≤0.01	No.	Yes.	-	Yes.
Carbon-black extracts	≤0.001	Yes.	No.	-	-

Canadian regulations

Canada Significant New Activity Notice : None of the components are listed.

Canadian NPRI The following components are listed: light aromatic solvent naphtha;1,2,4-trimethylbenzene; trimethylbenzene; other glycol ethers and acetates (and their isomers); xylene (all isomers); trimethylbenzene; cumene

CEPA Toxic substances : None of the components are listed.

International Inventory Status

Australia : At least one component is not listed.
Canada : At least one component is not listed.
China : At least one component is not listed.
Japan : At least one component is not listed.
Republic of Korea : At least one component is not listed.
New Zealand : At least one component is not listed.
Philippines : At least one component is not listed.
United States TSCA : All components are active or exempted.

Section 16. Other information

Date of issue/Date of revision : 10/9/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations
WOE = Weight of Evidence

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
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.