

2.5 gallon jugs



# 9000 HE ja1

## Material Safety Data Sheet

### 1. Product and company identification

Common name : 9000 HE ja1  
Internal code : IFS0274  
Supplier : Innospec Fuel Specialties LLC  
North American Headquarters  
8375 South Willow Street  
Littleton  
Colorado 80124  
USA  
Information contact : 1-800-441-9547  
In case of emergency : 1-800-424-9300 (Chemtrec)

### 2. Hazards identification

Physical state : Liquid.  
Odor : Aromatic.  
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
Emergency overview : WARNING!  
FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA. DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS.  
Flammable liquid. Harmful if absorbed through the skin. May be harmful if swallowed. Irritating to eyes, respiratory system and skin. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that can cause target organ damage. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Contains material which can cause developmental abnormalities. Avoid exposure during pregnancy. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

#### Potential acute health effects

Inhalation : Irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
Ingestion : Harmful if swallowed.  
Skin : Toxic in contact with skin. Irritating to skin.  
Eyes : Irritating to eyes.

#### Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage.  
Carcinogenicity : Contains material which may cause cancer, based on animal data. 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 : Contains material which can cause developmental abnormalities.  
Fertility effects : No known significant effects or critical hazards.

## 2. Hazards identification

**Target organs** : Contains material which causes damage to the following organs: blood, kidneys, liver, lymphatic system, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

### Over-exposure signs/symptoms

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

**Ingestion** : No specific data.

**Skin** : Adverse symptoms may include the following:  
irritation  
redness

**Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

## 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
solvent naphtha (petroleum), light arom.	64742-95-6	15 - 30
1,2,4-trimethylbenzene	95-63-6	10 - 14.99
xylene	1330-20-7	5 - 9.99
2-ethylhexan-1-ol	104-76-7	5 - 9.99
2-butoxyethanol	111-76-2	5 - 9.99
solvent naphtha (petroleum), heavy arom.	64742-94-5	1 - 4.99
ethylbenzene	100-41-4	1 - 4.99
naphthalene	91-20-3	0.1 - <1
vinyl acetate	108-05-4	0.1 - <1

## 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- 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.

## 5. Fire-fighting measures

- Flammability of the product : May be combustible at high temperature.
- Products of combustion : Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides

### Extinguishing media

- Suitable : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable : Do not use water jet.
- Special exposure hazards : Flammable liquid. 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.
- 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.
- 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.

## 6. Accidental release measures

- Personal precautions : 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 (see section 8).
- 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).
- Methods for cleaning up : Stop leak if without risk. Move containers from spill area. 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). Use spark-proof tools and explosion-proof equipment. 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.

## 7. Handling and storage

- Handling : Put on appropriate personal protective equipment (see section 8). 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. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage : 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. 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.

## 8. Exposure controls/personal protection

<u>Product name</u>	<u>Exposure limits</u>
1,2,4-trimethylbenzene	<p><b>ACGIH TLV (United States, 1/2008).</b>            TWA: 25 ppm, 0 times per shift, 8 hour(s).            TWA: 123 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 25 ppm, 0 times per shift, 8 hour(s).            TWA: 125 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p> <p><b>NIOSH REL (United States, 6/2008).</b>            TWA: 25 ppm, 0 times per shift, 10 hour(s).            TWA: 125 mg/m<sup>3</sup>, 0 times per shift, 10 hour(s).</p>
xylene	<p><b>ACGIH TLV (United States, 1/2008).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            TWA: 434 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).            STEL: 150 ppm, 0 times per shift, 15 minute(s).            STEL: 651 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).            STEL: 150 ppm, 0 times per shift, 15 minute(s).            STEL: 655 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>OSHA PEL (United States, 11/2006).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p>
2-butoxyethanol	<p><b>OSHA PEL 1989 (United States, 3/1989). Skin</b>            TWA: 25 ppm, 0 times per shift, 8 hour(s).            TWA: 120 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p> <p><b>NIOSH REL (United States, 6/2008). Skin</b>            TWA: 5 ppm, 0 times per shift, 10 hour(s).            TWA: 24 mg/m<sup>3</sup>, 0 times per shift, 10 hour(s).</p> <p><b>ACGIH TLV (United States, 1/2008).</b>            TWA: 20 ppm, 0 times per shift, 8 hour(s).</p> <p><b>OSHA PEL (United States, 11/2006). Skin</b>            TWA: 50 ppm, 0 times per shift, 8 hour(s).            TWA: 240 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p>
ethylbenzene	<p><b>ACGIH TLV (United States, 1/2008).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            STEL: 125 ppm, 0 times per shift, 15 minute(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).            STEL: 125 ppm, 0 times per shift, 15 minute(s).            STEL: 545 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>NIOSH REL (United States, 6/2008).</b>            TWA: 100 ppm, 0 times per shift, 10 hour(s).            TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 10 hour(s).            STEL: 125 ppm, 0 times per shift, 15 minute(s).            STEL: 545 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>OSHA PEL (United States, 11/2006).</b>            TWA: 100 ppm, 0 times per shift, 8 hour(s).            TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).</p>
naphthalene	<p><b>ACGIH TLV (United States, 1/2008).</b>            TWA: 10 ppm, 0 times per shift, 8 hour(s).            TWA: 52 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).            STEL: 15 ppm, 0 times per shift, 15 minute(s).            STEL: 79 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 10 ppm, 0 times per shift, 8 hour(s).            TWA: 50 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).            STEL: 15 ppm, 0 times per shift, 15 minute(s).            STEL: 75 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).</p> <p><b>NIOSH REL (United States, 6/2008).</b>            TWA: 10 ppm, 0 times per shift, 10 hour(s).            TWA: 50 mg/m<sup>3</sup>, 0 times per shift, 10 hour(s).            STEL: 15 ppm, 0 times per shift, 15 minute(s).</p>

## 8. Exposure controls/personal protection

vinyl acetate

- STEL: 75 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).  
**OSHA PEL (United States, 11/2006).**  
 TWA: 10 ppm, 0 times per shift, 8 hour(s).  
 TWA: 50 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).  
**ACGIH TLV (United States, 1/2007).**  
 TWA: 10 ppm, 0 times per shift, 8 hour(s).  
 TWA: 35 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).  
 STEL: 15 ppm, 0 times per shift, 15 minute(s).  
 STEL: 53 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).  
**OSHA PEL 1989 (United States, 3/1989).**  
 TWA: 10 ppm, 0 times per shift, 8 hour(s).  
 TWA: 30 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).  
 STEL: 20 ppm, 0 times per shift, 15 minute(s).  
 STEL: 60 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).  
**NIOSH REL (United States, 12/2001).**  
 CEIL: 4 ppm, 0 times per shift, 15 minute(s).  
 CEIL: 15 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).

Consult local authorities for acceptable exposure limits.

**Engineering measures** : 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.

### Personal protection

- Eyes** : 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.
- Skin** : 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.
- Respiratory** : Use a properly fitted, air-purifying or air-fed 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.
- Hands** : 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.
- 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.

## 9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 41.667°C (107°F) [Pensky-Martens.]
- Auto-ignition temperature** : Lowest known value: 244°C (471.2°F) (2-butoxyethanol).
- Flammable limits** : Greatest known range: Lower: 0.79% Upper: 12.7% (2-ethylhexan-1-ol)
- Color** : translucent Amber.
- Odor** : Aromatic.
- Boiling/condensation point** : Lowest known value: 136.05°C (276.9°F) (ethylbenzene). Weighted average: 165.03°C (329.1°F)
- Melting/freezing point** : <-15°C (5°F)
- Specific gravity** : 0.897 [ASTM D 4052]
- Vapor pressure** : Highest known value: 0.7 to 0.9 kPa (5 to 6.6 mm Hg) (at 20°C) (xylene). Weighted average: 0.35 kPa (2.63 mm Hg) (at 20°C)
- Vapor density** : Highest known value: 4.6 to 5.5 (Air = 1) (solvent naphtha (petroleum), heavy arom.). Weighted average: 4.29 (Air = 1)

## 9. Physical and chemical properties

Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.33 compared with Butyl acetate.
Dispersibility properties	: Not dispersible in the following materials: cold water.
Solubility	: Slightly soluble in water.

## 10. Stability and reactivity

Stability and reactivity	: The product is stable.
Incompatibility with various substances	: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. Incompatible with fluorine.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions of reactivity	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
solvent naphtha (petroleum), light arom. 1,2,4-trimethylbenzene	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Oral	Rat	5 g/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
xylene	LD50 Dermal	Rabbit	4320 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
2-butoxyethanol	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
	LC50 Inhalation Vapor	Rat	450 ppm	4 hours
2-ethylhexan-1-ol	LD50 Dermal	Rabbit	1970 mg/kg	-
	LD50 Oral	Rat	3730 mg/kg	-
solvent naphtha (petroleum), heavy arom.	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Vapor	Rat	>590 mg/m <sup>3</sup>	4 hours
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LC50 Inhalation Gas.	Rat	55000 mg/m <sup>3</sup>	2 hours
naphthalene	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	490 mg/kg	-
	LC50 Inhalation Vapor	Rat	>340 mg/m <sup>3</sup>	1 hours
vinyl acetate	LD50 Dermal	Rabbit	2335 mg/kg	-
	LD50 Oral	Rat	2900 mg/kg	-

Conclusion/Summary : Not available.

### Chronic toxicity

Conclusion/Summary : Not available.

### Irritation/Corrosion

Conclusion/Summary : Not available.

### Sensitizer

Conclusion/Summary : Not available.

### Carcinogenicity

Conclusion/Summary : Not available.

### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
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## 11 . Toxicological information

xylene	A4	3	-	-	-	-
2-butoxyethanol	A3	3	-	-	-	-
ethylbenzene	A3	2B	-	-	-	-
naphthalene	A4	2B	-	-	Possible	-
vinyl acetate	A3	2B	-	-	-	-

### Mutagenicity

Conclusion/Summary : Not available.

### Teratogenicity

Conclusion/Summary : Not available.

### Reproductive toxicity

Conclusion/Summary : Not available.

## 12 . Ecological information

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
1,2,4-trimethylbenzene	-	Acute LC50 7.72 mg/L	Fish - Pimephales promelas	96 hours
xylene	-	Acute LC50 3.3 mg/L	Fish - Oncorhynchus mykiss	96 hours
	-	Acute LC50 14400 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
2-butoxyethanol	-	Acute EC50 >1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 1490 mg/L	Fish - Lepomis macrochirus	96 hours
	-	Acute LC50 >1000 mg/L Marine water	Crustaceans - Amphipod - Chaetogammarus marinus	48 hours
	-	Chronic NOEC 1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
2-ethylhexan-1-ol	-	Acute EC50 11.5 mg/l	Algae	72 hours
	-	Acute EC50 39 mg/l	Daphnia - Daphnia	48 hours
	-	Acute LC50 10 to 33 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
solvent naphtha (petroleum), heavy arom.	-	Acute EC50 3 to 10 mg/l	Daphnia	48 hours
	-	Acute EC50 1 to 3 mg/l	Algae	72 hours
	-	Acute LC50 2 to 5 mg/l	Fish	96 hours
ethylbenzene	-	Acute EC50 7.2 mg/L	Algae - Selenastrum capricornutum	48 hours
	-	Acute EC50 2.93 mg/L	Daphnia - Daphnia magna	48 hours
	-	Acute LC50 12100 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Acute LC50 11900 ug/L Fresh water	Fish - Fathead minnow -	96 hours

## 12 . Ecological information

		water	Pimephales promelas	
	-	Acute LC50 4.2 mg/L	Fish - Oncorhynchus mykiss	96 hours
	-	Acute LC50 14000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
naphthalene	-	Acute EC50 1.96 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 1.6 mg/L	Fish - Oncorhynchus mykiss	96 hours
	-	Acute LC50 2350 ug/L Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
vinyl acetate	-	Acute LC50 18 mg/L	Fish - Lepomis macrochirus	96 hours
	-	Acute LC50 14 mg/L	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

### Biodegradability

Conclusion/Summary : Not available.

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

## 13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information






Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	NA1993	Combustible liquid, n.o.s. (solvent naphtha (petroleum), light arom. , 1,2,4- trimethylbenzene)	Combustible liquid.	III		<u>Limited quantity</u> Yes.  <u>Packaging instruction</u> Passenger aircraft Quantity limitation: 60 L

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## 14 . Transport information

						<p><b>Cargo aircraft</b> Quantity limitation: 220 L</p> <p><b>Special provisions</b> IB3,T1, T4, TP1</p> <p><b>Remarks</b> This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.</p>
TDG Classification	UN1993	FLAMMABLE LIQUID, N.O.S. (solvent naphtha (petroleum), light arom. , 1,2,4-trimethylbenzene)	3	III		<p><b>Explosive Limit and Limited Quantity Index</b> 5</p> <p><b>Passenger Carrying Road or Rail Index</b> 60</p> <p><b>Special provisions</b> 16</p>
Mexico Classification	UN1993	LIQUIDO INFLAMABLE, N.E.P. (solvent naphtha (petroleum), light arom. , 1,2,4-trimethylbenzene)	3	III		<p><b>Special provisions</b> 223, 274</p>
ADR/RID Class	UN1993	FLAMMABLE LIQUID, N.O.S. (solvent naphtha (petroleum), light arom. , 1,2,4-trimethylbenzene)	3	III		<p><b>Hazard identification number</b> 30</p> <p><b>Limited quantity</b> LQ7</p> <p><b>CEFIC Tremcard</b> 30GF1-III</p>
IMDG Class	UN1993	FLAMMABLE LIQUID, N.O.S. (solvent naphtha (petroleum), light arom. , 1,2,4-trimethylbenzene)	3	III		<p><b>Emergency schedules (EmS)</b> F-E, _S-E_</p>
IATA-DGR Class	UN1993	Flammable liquid, n.o.s. (solvent naphtha (petroleum), light arom. , 1,2,4-trimethylbenzene)	3	III		<p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 60 L Packaging instructions: 309</p> <p><b>Cargo Aircraft Only</b> Quantity limitation: 220</p>

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## 14. Transport information

						L Packaging instructions: 310 <u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 10 L Packaging instructions: Y309
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PG\* : Packing group

Reportable quantity : CERCLA: Hazardous substances.: xylene: 100 lbs. (45.4 kg); ethylbenzene: 1000 lbs. (454 kg); vinyl acetate: 5000 lbs. (2270 kg); naphthalene: 100 lbs. (45.4 kg); toluene: 1000 lbs. (454 kg); cumene: 5000 lbs. (2270 kg); 2-butoxyethanol;

Flash point : Closed cup: 41.667°C (107°F) [Pensky-Martens.]

## 15. Regulatory information

### United States

HCS Classification : Combustible liquid  
 Toxic material  
 Irritating material  
 Carcinogen  
 Target organ effects

U.S. Federal regulations : TSCA 4(a) final test rules: naphthalene  
 TSCA 8(a) PAIR: naphthalene  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
 TSCA 12(b) one-time export: naphthalene

**SARA 302/304/311/312 extremely hazardous substances:** No products were found.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** xylene; ethylbenzene; 1,2,4-trimethylbenzene; 2-ethylhexan-1-ol; 2-butoxyethanol

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**

xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
 ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
 1,2,4-trimethylbenzene: Fire hazard, Delayed (chronic) health hazard;  
 2-ethylhexan-1-ol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
 2-butoxyethanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

**Clean Water Act (CWA) 307:** ethylbenzene; naphthalene; toluene

**Clean Water Act (CWA) 311:** xylene; ethylbenzene; vinyl acetate; naphthalene; toluene

**Clean Air Act (CAA) 112 accidental release prevention:** vinyl acetate

**Clean Air Act (CAA) 112 regulated flammable substances:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** vinyl acetate

Not available.

### SARA 313

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: 1,2,4-trimethylbenzene	95-63-6	9.99 - 14.99
	xylene	1330-20-7	4.99 - 9.99
	2-butoxyethanol	111-76-2	4.99 - 9.99
	ethylbenzene	100-41-4	0.99 - 4.99
	naphthalene	91-20-3	0.09 - 0.99
	vinyl acetate	108-05-4	0.09 - 0.99
Supplier notification	: 1,2,4-trimethylbenzene	95-63-6	9.99 - 14.99
	xylene	1330-20-7	4.99 - 9.99
	2-butoxyethanol	111-76-2	4.99 - 9.99
	ethylbenzene	100-41-4	0.99 - 4.99
	naphthalene	91-20-3	0.09 - 0.99
	vinyl acetate	108-05-4	0.09 - 0.99
State regulations	: <b>WARNING:</b> This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.		

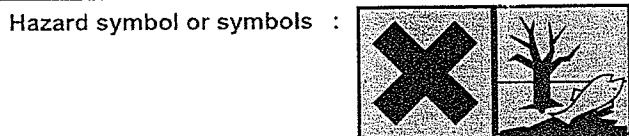
## 15 . Regulatory information

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
ethylbenzene	Yes.	No.	No.	No.
naphthalene	Yes.	No.	Yes.	No.
toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)

### Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).  
 Class D-1A: Material causing immediate and serious toxic effects (Very toxic).  
 Class D-2A: Material causing other toxic effects (Very toxic).  
 Class D-2B: Material causing other toxic effects (Toxic).  
 This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

### EU regulations



Risk phrases : R10- Flammable.  
 R20- Harmful by inhalation.  
 R36/38- Irritating to eyes and skin.  
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

## 16 . Other information

Label requirements : FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA. DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS.

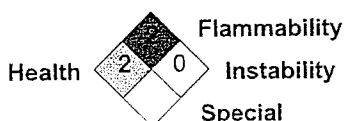
Hazardous Material Information System (U.S.A.) :

Health	2
Flammability	2
Instability	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



## 16 . Other information

Date of printing : 28/01/2010.  
Date of issue : 28/01/2010.  
Date of previous issue : 27/01/2010.  
Version : 0.06

Indicates information that has changed from previously issued version.

### 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.