



# SAFETY DATA SHEET

## CFI-W

### SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### 1.1 Product identifier

**Product name** : CFI-W  
**Product code** : 13017  
**Internal code** : 13017  
**Product description** : Mixture  
**Product type** : Liquid.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Petrochemical industry: Fuel additive.

#### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Innospec Limited  
Innospec Manufacturing Park  
Oil Sites Road  
Ellesmere Port  
Cheshire CH65 4EY  
United Kingdom

**Telephone no.:** : +44 (0)151 355 3611  
**Fax no.** : +44 (0)151 356 2349  
**e-mail address of person responsible for this SDS** : sdsinfo@innospecinc.com  
**NON-emergency enquiries** : corporatecommunications@innospecinc.com

#### 1.4 Emergency telephone number

In Europe, Middle East, Africa, Asia Pacific and South America  
24 hour / 7 day emergency response for our products is  
provided by the NCEC CARECHEM 24 global network



The main regional centres are listed here in Section 1. Other local contact numbers for specific language support in Asia Pacific are listed in Section 16.

#### Country information

Country information	Emergency telephone number	Location
Europe ( all countries, all languages )	: +44 (0) 1235 239 670	London, UK
Middle East, Africa ( Arabic, French, English )	: +44 (0) 1235 239 671	Lebanon
Middle East, Africa ( French, Portuguese, English )	: +44 (0) 1235 239 670	London UK
Asia Pacific ( all countries except China )	: +65 3158 1074	Singapore
China	: +86 10 5100 3039	Beijing China
South America ( all countries except Brazil and Mexico )	: +1 215 207 0061	Philadelphia USA
Brazil	: +55 11 3197 5891	Brazil
Mexico	: +52 555 004 8763	Mexico

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

In USA, Canada and North America, 24 h/7 days of emergency response for our product is provided by the CHEMTREC(R) Emergency Call Center based in the USA.

<b>Country information</b>	: <b>Emergency telephone number</b>
USA	: 800 424 9300
Canada, Puerto Rico, Virgin Islands	: +1 800 424 9300
In case of difficulty using the toll-free number, or for ships at sea, call	: +1 703 527 3887
See section 16.	

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

STOT SE 3, H336  
 Asp. Tox. 1, H304  
 Aquatic Chronic 2, H411

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H304 - May be fatal if swallowed and enters airways.  
 H336 - May cause drowsiness or dizziness.  
 H411 - Toxic to aquatic life with long lasting effects.

**Supplemental label elements** : Repeated exposure may cause skin dryness or cracking.

#### Precautionary statements

**General** : Not applicable.

**Prevention** : P271 - Use only outdoors or in a well-ventilated area.  
 P273 - Avoid release to the environment.  
 P261 - Avoid breathing vapour.

**Response** : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]

#### Special packaging requirements

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Other hazards which do not result in classification** : None known.

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### SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	REACH #: 01-2119463583-34 EC: 265-198-5, [918-811-1] CAS: 64742-94-5 Index: 649-424-00-3	≥75 - ≤90	Xn; R65 R66, R67 N; R51/53	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1] [2]
1,2,4-trimethylbenzene	REACH #: Compliant EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	≤5	R10 Xn; R20 Xi; R36/37/38 N; R51/53	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
naphthalene	REACH #: Compliant EC: 202-049-5 CAS: 91-20-3 Index: 601-052-00-2	<1	Carc. Cat. 3; R40 Xn; R22 N; R50/53	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [2]
2-ethylhexanoic acid	REACH #: 01-2119488942-23 EC: 205-743-6 CAS: 149-57-5 Index: 607-230-00-6	≤0.3	Repr. Cat. 3; R63	Repr. 2, H361d (Unborn child)	[1]
			<b>See Section 16 for the full text of the R-phrases declared above.</b>	<b>See Section 16 for the full text of the H statements declared above.</b>	

#### Additional information

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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

Our REACH (pre-) registrations DO NOT cover the following:

- The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
- The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations. Customers and other third parties importing and/or re-importing our products into Europe will need either:
  - Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
  - In the case of importation only, to make use of the "Only Representative" provisions, if available.

### SECTION 4: First aid measures

#### 4.1 Description of 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 10 minutes. Get medical attention.

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## SECTION 4: First aid measures

- 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. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Remove dentures if any. Wash out mouth with water. Stop if the exposed person feels sick as vomiting may be dangerous. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
- 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.

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

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : 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:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. 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

### 5.3 Advice for firefighters

**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.

**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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 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 spilt material. Avoid breathing vapour 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".

### 6.2 Environmental precautions

: Avoid dispersal of spilt 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.

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. 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. Approach the 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

### 6.4 Reference to other sections

: See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

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## SECTION 6: Accidental release measures

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. 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.

**7.2 Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.] 1,2,4-trimethylbenzene  naphthalene	<b>Supplier/Manufacturer (Europe, 2015).</b> EU HSPA (RCP Aromatic solvents 180 - 215): 151 mg/m <sup>3</sup> 8 hours.  <b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 25 ppm, 0 times per shift, 8 hours. TWA: 125 mg/m <sup>3</sup> , 0 times per shift, 8 hours. <b>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values</b> TWA: 10 ppm 8 hours. TWA: 50 mg/m <sup>3</sup> , 0 times per shift, 8 hours.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482

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**SECTION 8: Exposure controls/personal protection**

(Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects	
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	DNEL	Long term Dermal	12.5 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	151 mg/m <sup>3</sup>	Workers	Systemic	
	DNEL	Long term Dermal	7.5 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Inhalation	32 mg/m <sup>3</sup>	Consumers	Systemic	
	DNEL	Long term Oral	7.5 mg/kg bw/day	Consumers	Systemic	
	1,2,4-trimethylbenzene	DNEL	Short term Inhalation	100 mg/m <sup>3</sup>	Workers	Systemic
		DNEL	Short term Inhalation	100 mg/m <sup>3</sup>	Workers	Local
		DNEL	Long term Dermal	16171 mg/kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	100 mg/m <sup>3</sup>	Workers	Systemic
		DNEL	Long term Inhalation	100 mg/m <sup>3</sup>	Workers	Local
		DNEL	Short term Inhalation	29.4 mg/m <sup>3</sup>	Consumers	Systemic
		DNEL	Short term Inhalation	29.4 mg/m <sup>3</sup>	Consumers	Local
		DNEL	Long term Dermal	9512 mg/kg bw/day	Consumers	Systemic
		DNEL	Long term Inhalation	29.4 mg/m <sup>3</sup>	Consumers	Systemic
DNEL		Long term Oral	15 mg/kg bw/day	Consumers	Systemic	
naphthalene	DNEL	Long term Inhalation	29.4 mg/m <sup>3</sup>	Consumers	Local	
	DNEL	Long term Dermal	3.57 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	25 mg/m <sup>3</sup>	Workers	Systemic	
	DNEL	Long term Inhalation	25 mg/m <sup>3</sup>	Workers	Local	
2-ethylhexanoic acid	DNEL	Short term Inhalation	106.4 mg/m <sup>3</sup>	Workers	Local	
	DNEL	Long term Dermal	23 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	53.2 mg/m <sup>3</sup>	Workers	Systemic	
	DNEL	Short term Inhalation	53.2 mg/m <sup>3</sup>	Consumers	Local	
	DNEL	Long term Dermal	11.4 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Inhalation	2.3 mg/m <sup>3</sup>	Consumers	Systemic	
	DNEL	Long term Oral	1.1 mg/kg bw/day	Consumers	Systemic	

**PNECs**

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**SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
1,2,4-trimethylbenzene	PNEC	Fresh water	0.12 mg/l	-
	PNEC	Marine	0.12 mg/l	-
	PNEC	Sewage Treatment Plant	2.41 mg/l	-
naphthalene	PNEC	Fresh water sediment	13.56 mg/kg dwt	-
	PNEC	Marine water sediment	13.56 mg/kg dwt	-
	PNEC	Soil	2.34 mg/kg dwt	-
	PNEC	Fresh water	2.4 µg/l	-
	PNEC	Marine	0.24 µg/l	-
	PNEC	Sewage Treatment Plant	2.9 mg/l	-
2-ethylhexanoic acid	PNEC	Fresh water sediment	67.2 µg/kg dwt	-
	PNEC	Marine water sediment	67.2 µg/kg dwt	-
	PNEC	Soil	53.3 µg/kg dwt	-
	PNEC	Fresh water	0.017 mg/l	-
	PNEC	Marine	0.0017 mg/l	-
	PNEC	Sewage Treatment Plant	10 mg/l	-
	PNEC	Fresh water sediment	0.28 mg/kg dwt	-
	PNEC	Marine water sediment	0.028 mg/kg dwt	-
	PNEC	Soil	0.047 mg/kg dwt	-

**8.2 Exposure controls**

**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.

**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: safety glasses with side-shields. Recommended: 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Viton®  
1 - 4 hours (breakthrough time): nitrile rubber

**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.

**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. Recommended: organic vapour filter (Type A)



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## SECTION 8: Exposure controls/personal protection

**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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid. [Clear to slightly hazy liquid.]
<b>Colour</b>	: Amber. Clear to slightly hazy
<b>Odour</b>	: Aromatic.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Lowest known value: 168.01°C (334.4°F) (1,2,4-trimethylbenzene). Weighted average: 195.03°C (383.1°F)
<b>Flash point</b>	: Closed cup: >60°C (>140°F) [Pensky-Martens.]
<b>Evaporation rate</b>	: 0.05 (Solvent naphtha (petroleum), heavy arom.) compared with butyl acetate
<b>Flammability (solid, gas)</b>	: Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Greatest known range: Lower: 0.6% Upper: 7% (Solvent naphtha (petroleum), heavy arom.)
<b>Vapour pressure</b>	: Highest known value: 0.1 kPa (0.8 mm Hg) (at 20°C) (Solvent naphtha (petroleum), heavy arom.).
<b>Vapour density</b>	: Highest known value: 4.6 to 5.5 (Air = 1) (Solvent naphtha (petroleum), heavy arom.). Weighted average: 5 (Air = 1)
<b>Relative density</b>	: Not available.
<b>Density</b>	: 0.9 g/cm <sup>3</sup> [15°C (59°F)]
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water, hot water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Lowest known value: 425°C (797°F) (Solvent naphtha (petroleum), heavy arom.).
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): 0.0382 cm <sup>2</sup> /s (3.82 cSt)
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

**Pour point** : -30°C

## SECTION 10: Stability and reactivity

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

**10.2 Chemical stability** : Incompatible with fluorine.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

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## SECTION 10: Stability and reactivity

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : No specific data.

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

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Test	Species	Result	Dose
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	-	Rat	LC50 Inhalation Vapour	>590 mg/m <sup>3</sup> 4 hours
	-	Rabbit	LD50 Dermal	>2 mL/kg -
naphthalene	-	Rabbit	LD50 Dermal	2000 mg/kg -
	-	Rat	LDLo Oral	5 mL/kg -
	-	Rat	LC50 Inhalation Vapour	>340 mg/m <sup>3</sup> 1 hours
	-	Rabbit	LD50 Dermal	>2000 mg/kg -
2-ethylhexanoic acid	-	Rat	LD50 Dermal	>2500 mg/kg -
	-	Rat	LD50 Oral	490 mg/kg -
	-	Rabbit	LD50 Dermal	>2000 mg/kg -
	-	Rat	LD50 Oral	3640 mg/kg -
<b>Route</b>			<b>ATE value</b>	

#### Irritation/Corrosion

Product/ingredient name	Test	Species	Result
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	-	Rabbit	Skin - Mild irritant -
	-	Mammal - species unspecified	Eyes - Mild irritant -
2-ethylhexanoic acid	-	Rabbit	Skin - Mild irritant -

#### Reproductive toxicity

Product/ingredient name	Test	Species	Result	Dose
2-ethylhexanoic acid	-	Rat - Male, Female	Developmental effects Unborn child	Oral: 600 mg/kg

**Information on likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

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

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## SECTION 11: Toxicological information

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

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Delayed and immediate effects as well as 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.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

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

**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.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Test	Species	Exposure	Result
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	-	Algae	72 hours	Acute EC50 1 to 3 mg/l
	-	Daphnia	48 hours	Acute EC50 3 to 10 mg/l
	-	Fish	96 hours	Acute LC50 2 to 5 mg/l
1,2,4-trimethylbenzene  naphthalene	-	Fish - Pimephales promelas	96 hours	Acute LC50 7.72 mg/l
	-	Daphnia - Water flea - Daphnia magna	48 hours	Acute EC50 1.96 mg/l Fresh water
	-	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours	Acute LC50 2350 µg/l Marine water
	-			

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## SECTION 12: Ecological information

2-ethylhexanoic acid	-	Fish - Oncorhynchus mykiss Daphnia	96 hours 48 hours	Acute LC50 1.6 mg/l EC50 85.4 mg/l
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### 12.2 Persistence and degradability

Product/ingredient name	Test	Result
2-ethylhexanoic acid	- 301D Ready Biodegradability - Closed Bottle Test	83 % - Readily - 20 days 76 % - Readily - 10 days

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	-	-	Inherent
2-ethylhexanoic acid	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Hydrocarbons C10, Aromatics, <1% Naphthalene, [Solvent naphtha (petroleum), heavy arom.]	2.8 to 6.5	<100	low
1,2,4-trimethylbenzene	4.09	275	low
naphthalene	3.3	>100	low
2-ethylhexanoic acid	2.7	-	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

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

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised 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.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

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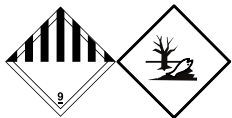
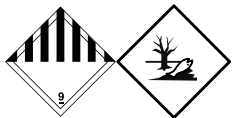
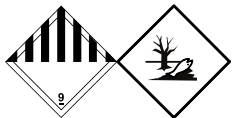
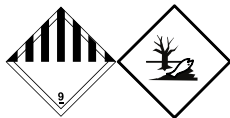
### SECTION 13: Disposal considerations

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

### SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha (petroleum), heavy arom., 1,2, 4-trimethylbenzene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha (petroleum), heavy arom., 1,2, 4-trimethylbenzene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha (petroleum), heavy arom., 1,2, 4-trimethylbenzene). Marine pollutant (Solvent naphtha (petroleum), heavy arom., naphthalene)	Environmentally hazardous substance, liquid, n.o.s. (Solvent naphtha (petroleum), heavy arom., 1,2, 4-trimethylbenzene)
14.3 Transport hazard class(es)	9 	9 	9 	9 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.
Additional information	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p><b>Hazard identification number</b> 90</p> <p><b>Limited quantity</b> 5 L</p> <p><b>Special provisions</b> 274, 335, 601, 375</p> <p><b>Tunnel code</b> (E)</p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p><b>Special provisions</b> 274, 335, 375, 601</p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p><b>Emergency schedules (EmS)</b> F-A, S-F</p> <p><b>Special provisions</b> 274, 335, 969</p>	

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**SECTION 14: Transport information**

14.6 Special precautions for user				
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not available.			

**SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions** : Not applicable.  
**on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Other EU regulations

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E2: Hazardous to the aquatic environment - Chronic 2	200	500
9ii: Toxic for the environment	200	500

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Not determined

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
naphthalene	Carc. 2, H351	-	-	-
2-ethylhexanoic acid	-	-	Repr. 2, H361d (Unborn child)	-

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

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## SECTION 15: Regulatory information

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

### International lists

**Australia inventory (AICS)** : All components are listed or exempted.

**Canada inventory** : All components are listed or exempted.

**China inventory (IECSC)** : At least one component is not listed.

**EU Inventory (EINECS/ELINCS/NLP)** : All components are listed or exempted.

**Japan inventory (ENCS)** : **Japan inventory (ENCS)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.

**Korea inventory (KECI)** : All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.

**Philippines inventory (PICCS)** : Not determined.

**Taiwan inventory (TCSI)** : All components are listed or exempted.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

### Classification according to Directive 67/548/EEC [DSD] or Classification according to Directive 1999/45/EC [DPD]

**Indication of danger** : Harmful, Dangerous for the environment

**Risk phrases** : R65- Harmful: may cause lung damage if swallowed.  
R66- Repeated exposure may cause skin dryness or cracking.  
R67- Vapours may cause drowsiness and dizziness.  
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.

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	Calculation method Calculation method Calculation method

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## SECTION 16: Other information

<b>Full text of abbreviated H statements</b>	: H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H361d Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.
<b>Full text of classifications [CLP/GHS]</b>	: Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4 Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4 Aquatic Acute 1, H400 ACUTE AQUATIC HAZARD - Category 1 Aquatic Chronic 1, H410 LONG-TERM AQUATIC HAZARD - Category 1 Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1 Carc. 2, H351 CARCINOGENICITY - Category 2 EUH066 Repeated exposure may cause skin dryness or cracking. Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3 Repr. 2, H361d REPRODUCTIVE TOXICITY (Unborn child) - Category 2 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
<b>Full text of abbreviated R phrases</b>	: R10- Flammable. R40- Limited evidence of a carcinogenic effect. R63- Possible risk of harm to the unborn child. R20- Harmful by inhalation. R22- Harmful if swallowed. R65- Harmful: may cause lung damage if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Full text of classifications [DSD/DPD]</b>	: Carc. Cat. 3 - Carcinogen category 3 Repr. Cat. 3 - Toxic to reproduction category 3 Xn - Harmful Xi - Irritant N - Dangerous for the environment
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<b>Version</b>	: 6.01

## Emergency contact numbers for local language support in Asia Pacific region

Country information	Languages supported	Telephone no.:	Location
Australia	English	+61 2 8014 4558	Australia
Bangladesh	Bengali, English	+65 3158 1200	Singapore
China	Mandarin, English	+86 10 5100 3039	Beijing China
India	Hindi, English	+65 3158 1198	Singapore



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**SECTION 16: Other information**

India ( local toll free number )	Hindi, English	000800 100 7479	India
Indonesia (local toll free number)	Bahasa Indonesian, English	00780 3011 0293	Indonesia
Japan	Japanese, English	+81 3 4578 9341	Japan
Korea	Korean, English	+65 3158 1285	Singapore
Malaysia	Bahasa Malaysian, English	+60 3 6207 4347	Malaysia
New Zealand	English	+64 9929 1483	New Zealand
Pakistan	Urdu, English	+65 3158 1329	Singapore
Philippines	Tagalog, English	+65 3158 1203	Singapore
Sri Lanka	Sinhalese, English	+65 3158 1195	Singapore
Thailand (local toll free number)	Thai, English	001800 1 2066 6751	Thailand
Vietnam	Vietnamese, English	+65 3158 1255	Singapore

**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.**