

# SAFETY DATA SHEET

## Octamar (TM) LI-5

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

#### 1.1 Product identifier

**Product name** : Octamar (TM) LI-5  
**Product code** : FS-000196  
**Internal code** : 14021  
**Product description** : Mixture  
**Product type** : Liquid.

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

##### Identified uses

Petrochemical industry: Petrochemicals. 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	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]**

Eye Dam. 1, H318  
 Aquatic Chronic 2, H411

**2.2 Label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H318 - Causes serious eye damage.  
 H411 - Toxic to aquatic life with long lasting effects.

**Supplemental label elements** : Not applicable.

**Precautionary statements**

**General** : Not applicable.

**Prevention** : P280 - Wear eye or face protection: Recommended: splash goggles.  
 P273 - Avoid release to the environment.

**Response** : P305 + P351 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a POISON CENTER or physician.

**Storage** : Not applicable.

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

**Hazardous ingredients** : Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.

**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]	
Reaction mass of 2, 6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	REACH #: 01-2119538013-51 CAS: 128-39-2, 732-26-3	≤10	Xi; R41 N; R50/53  <b>See Section 16 for the full text of the R-phrases declared above.</b>	Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

#### Additional information

#### 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:

1. The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
  2. 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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. 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. 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** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. 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.

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## SECTION 4: First aid measures

**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.

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

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
 pain  
 watering  
 redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur

**Ingestion** : Adverse symptoms may include the following:  
 stomach pains

### 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.

## 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

**Aliphatic carboxylic acid.**: This material increases the risk of fire and may aid combustion.

### 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.

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## SECTION 5: Firefighting measures

- 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. Do not breathe 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.

## 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.

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## SECTION 7: Handling and storage

**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

No exposure limit value known.

**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 (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

No DELs available.

#### PNECs

No PECs available.

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: splash goggles

#### Skin protection



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## SECTION 8: Exposure controls/personal 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)
- 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

- Physical state** : Liquid.
- Colour** : Yellow.
- Odour** : Aromatic.
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : <-10°C
- Initial boiling point and boiling range** : Lowest known value: >200°C (>392°F)(Aliphatic carboxylic acid.).
- Flash point** : Closed cup: 96°C (204.8°F) [Pensky-Martens.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Highest known value: <0.0001 kPa (<0.001 mm Hg) (at 20°C) (Aliphatic carboxylic acid.).
- Vapour density** : Not available.
- Relative density** : Not available.
- Density** : 0.909 g/cm<sup>3</sup> [15°C (59°F)]
- Solubility(ies)** : Easily soluble in the following materials: diethyl ether, acetone.  
Very slightly soluble in the following materials: hot water.  
Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/ water** : Not available.
- Auto-ignition temperature** : Lowest known value: 362°C (683.6°F) (Aliphatic carboxylic acid.).
- Decomposition temperature** : Not available.

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## SECTION 9: Physical and chemical properties

**Viscosity** : Kinematic (40°C (104°F)): 0.16 cm<sup>2</sup>/s (16 cSt)  
**Explosive properties** : Not available.  
**Oxidising properties** : Not available.

### 9.2 Other information

**Pour point** : -15°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** : The product is stable.

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

**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
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	OECD 402 Acute Dermal Toxicity	Rat - Male, Female	LD50 Dermal	>2000 mg/kg -
	OECD 401 Acute Oral Toxicity	Rat - Male, Female	LD50 Oral	2976 mg/kg -

#### Irritation/Corrosion

Product/ingredient name	Test	Species	Result
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	OECD 404 Acute Dermal Irritation/Corrosion	Rabbit	Skin - Oedema 0
	OECD 405 Acute Eye Irritation/Corrosion	Rabbit	Eyes - Cornea opacity 3
	OECD 405 Acute Eye Irritation/Corrosion	Rabbit	Eyes - Redness of the conjunctivae 3

#### Sensitisation

Product/ingredient name	Test	Species	Result
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	-	Guinea pig	Not sensitizing -

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

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.



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## SECTION 11: Toxicological information

- Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

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

- Eye contact** : Adverse symptoms may include the following:  
 pain  
 watering  
 redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
 stomach pains

### 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** : No known significant effects or critical hazards.  
**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
Octamar (TM) LI-5	-	Fish	96 hours	Acute LC50 10 to 20 mg/l Estimated.
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	OECD 201 Alga, Growth Inhibition Test	Algae - S. capricornutum	72 hours	Acute EC50 4.9 mg/l Key data sources
	EU C.2 202 Daphnia sp. Acute Immobilisation Test	Daphnia	48 hours	Acute EC50 0.4 mg/l Key data sources
	EU C.1 203 Fish, Acute Toxicity Test	Fish - Oncorhynchus mykiss	96 hours	Acute LC50 0.3 mg/l Key data sources

### 12.2 Persistence and degradability

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## SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	Fresh water 73.5 days, 20°C	<1 day(s)	Not readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol.	4.9	-	high

### 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.

#### Packaging




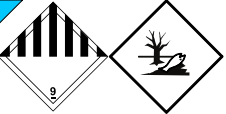
**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**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

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**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. (phenol, 2,6-di-tert-butyl-)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (phenol, 2,6-di-tert-butyl-)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (phenol, 2,6-di-tert-butyl-). Marine pollutant (phenol, 2,6-di-tert-butyl-)	Environmentally hazardous substance, liquid, n.o.s. (phenol, 2,6-di-tert-butyl-)
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, 601, 335</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>	
14.6 Special precautions for user				
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not available.			

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## 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
<input checked="" type="checkbox"/> 2: Hazardous to the aquatic environment - Chronic 2	200	500
<input type="checkbox"/> 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

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

**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)** : All components are listed or exempted.

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

**Japan inventory (ENCS)** :  **Japan inventory (ENCS)**: All components are listed or exempted.  
**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)** : All components are listed or exempted.

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

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

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**SECTION 15: Regulatory information**

**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** : Irritant, Dangerous for the environment  
**Risk phrases** : R36- Irritating to eyes.  
 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
Eye Dam. 1, H318	Calculation method
Aquatic Chronic 2, H411	Calculation method

**Full text of abbreviated H statements** : H318 Causes serious eye damage.  
 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.

**Full text of classifications [CLP/GHS]** : 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  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

**Full text of abbreviated R phrases** : R41- Risk of serious damage to eyes.  
 R36- Irritating to eyes.  
 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.

**Full text of classifications [DSD/DPD]** : Xi - Irritant  
 N - Dangerous for the environment

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**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

**Octamar (TM) LI-5****SECTION 16: Other information**

China	Mandarin, English	+86 10 5100 3039	Beijing China
India	Hindi, English	+65 3158 1198	Singapore
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

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