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

#### 1.1 Product identifier

| Trade name   | : | AeroShell Turbine Oil 2 |
|--------------|---|-------------------------|
| Product code | : | 001A0904                |

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

| Use of the<br>Substance/Mixture | Mineral lubricating oil for aircraft turbine engines., Fo<br>details consult the AeroShell Book on www.shell.com  |     |
|---------------------------------|---|-----|
| Uses advised against            | This product must not be used in applications other t<br>listed in Section 1 without first seeking the advice of<br>supplier.<br>This product must be used, handled and applied in<br>accordance with the requirements of the equipment<br>manufacturer's manuals, bulletins and other docume<br>Not to be used as an engine lubricating oil. | the |

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

| Manufacturer/Supplier                  | <ul> <li>Shell UK Oil Products Limited</li> <li>Shell Centre</li> <li>London</li> <li>SE1 7NA</li> <li>United Kingdom</li> </ul> |
|--|--|
| Telephone                              | : (+44) 08007318888  |
| Telefax                                |  |
| Email Contact for Safety Data<br>Sheet | : If you have any enquiries about the content of this SDS please email lubricantSDS@shell.com                                    |

### **1.4 Emergency telephone number**

: +44-(0) 151-350-4595

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

| 4: May be fatal if swallowed and enters                      |
|--|
| ays.<br>2: Harmful to aquatic life with long lasting<br>cts. |
| /  |

### Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment

R52/53: Harmful to aquatic organisms, may cause

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long-term adverse effects in the aquatic environment.

### 2.2 Label elements

| Labelling (REGULATION (EC  | ) No 1272/2008)               |   |
|----------------------------|-------------------------------|---|
| Hazard pictograms :        |                               |   |
| Signal word :              | Danger                        |   |
| Hazard statements :        |                               | PHYSICAL HAZARDS:<br>Not classified as a physical hazard<br>according to CLP criteria.<br>HEALTH HAZARDS: |
|                            | H304                          | May be fatal if swallowed and enters<br>airways.<br>ENVIRONMENTAL HAZARDS:                                |
|                            | H412                          | Harmful to aquatic life with long lasting effects.  |
| Precautionary statements : | Prevention:                   |   |
| ,                          | P273<br><b>Response:</b>      | Avoid release to the environment.   |
|                            | P301 + P310                   | IF SWALLOWED: Immediately call a<br>POISON CENTER/doctor.   |
|                            | P331                          | Do NOT induce vomiting.   |
|                            | Storage:<br>P405<br>Disposal: | Store locked up.  |
|                            | P501                          | Dispose of contents/ container to an approved waste disposal plant.                                       |

### 2.3 Other hazards

This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used oil may contain harmful impurities.

Not classified as flammable but will burn.

### **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

| Chemical nature | <ul> <li>Highly refined mineral oils and additives.</li> <li>The highly refined mineral oil contains &lt;3% (w/w) DMSO-</li> </ul> |
|-----------------|--|
|                 |  |

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extract, according to IP346.

### Hazardous components

| Chemical Name   | CAS-No.<br>EC-No.<br>Registration<br>number    | Classification<br>(67/548/EEC) | Classification<br>(REGULATION<br>(EC) No<br>1272/2008) | Concentration<br>[%] |
|---|--|--------------------------------|--|----------------------|
| Distillates<br>(petroleum),<br>hydrotreated light<br>naphthenic | 64742-53-6<br>265-156-6 / 01-<br>2119480375-34 |                                | Asp. Tox.1; H304                                       | 90 - 98              |
| Butylated<br>hydroxytoluene                                     | 128-37-0<br>204-881-4 / 01-<br>2119565113-46   | N; R50/53                      | Aquatic Chronic1;<br>H410<br>Aquatic Acute1;<br>H400   | 0.25 - 0.9           |

For explanation of abbreviations see section 16.

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

| Protection of first-aiders    | : When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.  |
|-------------------------------|--|
| If inhaled                    | : No treatment necessary under normal conditions of use.<br>If symptoms persist, obtain medical advice.  |
| In case of skin contact       | <ul> <li>Remove contaminated clothing. Flush exposed area with<br/>water and follow by washing with soap if available.</li> <li>If persistent irritation occurs, obtain medical attention.</li> </ul>  |
| In case of eye contact        | : Flush eye with copious quantities of water.<br>If persistent irritation occurs, obtain medical attention.  |
| If swallowed                  | If swallowed, do not induce vomiting: transport to nearest<br>medical facility for additional treatment. If vomiting occurs<br>spontaneously, keep head below hips to prevent aspiration.<br>If any of the following delayed signs and symptoms appear<br>within the next 6 hours, transport to the nearest medical<br>facility: fever greater than 101° F (38.3°C), shortness of<br>breath, chest congestion or continued coughing or wheezing. |
| 4.2 Most important symptoms a | nd effects, both acute and delayed   |
| Symptoms                      | : If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure.   |
| 0./40                         | 000001000  |

| AeroSheli Turbine Oli Z          |   |                       |
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|                                  | Defatting dermatitis signs and sympton<br>burning sensation and/or a dried/cra<br>Ingestion may result in nausea, vom | cked appearance.      |
| 4.3 Indication of any immediate  | medical attention and special treatmer  | nt needed             |
| Treatment                        | : Notes to doctor/physician:<br>Treat symptomatically.<br>Call a doctor or poison control cente                       | r for guidance.       |
| SECTION 5: Firefighting meas     | sures   |                       |
| 5.1 Extinguishing media          |   |                       |
| Suitable extinguishing media     | : Foam, water spray or fog. Dry chem dioxide, sand or earth may be used   | •                     |
| Unsuitable extinguishing media   | : Do not use water in a jet.  |                       |
| 5.2 Special bazards arising from | the substance or mixture  |                       |

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

|     | Specific hazards during firefighting          | : | Hazardous combustion products may include: A complex<br>mixture of airborne solid and liquid particulates and gases<br>(smoke). Carbon monoxide may be evolved if incomplete<br>combustion occurs. Unidentified organic and inorganic<br>compounds.   |
|-----|---|---|---|
| 5.3 | Advice for firefighters                       |   |   |
|     | Special protective equipment for firefighters | : | Proper protective equipment including chemical resistant<br>gloves are to be worn; chemical resistant suit is indicated if<br>large contact with spilled product is expected. Self-Contained<br>Breathing Apparatus must be worn when approaching a fire in<br>a confined space. Select fire fighter's clothing approved to<br>relevant Standards (e.g. Europe: EN469). |
|     | Specific extinguishing methods                | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

| Personal precautions | : 6.1.1 For non emergency personnel: |
|----------------------|--------------------------------------|
|                      | Avoid contact with skin and eyes.    |
|                      | 6.1.2 For emergency responders:      |
|                      | Avoid contact with skin and eyes.    |

### 6.2 Environmental precautions

| Environmental precautions : Use appropriate containment to avoid environmental |
|--|
|--|

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|---|--|---|--|--|
|   | contamination. Prevent from spreading or ditches or rivers by using sand, earth, or o barriers.  |   |  |  |
|   | Local authorities should be advised if sign cannot be contained.   | ificant spillages   |  |  |
| 6.3 Methods and materials for containment and cleaning up |  |   |  |  |
| Methods for cleaning up                                   | <ul> <li>Slippery when spilt. Avoid accidents,<br/>Prevent from spreading by making a<br/>or other containment material.<br/>Reclaim liquid directly or in an absorb<br/>Soak up residue with an absorbent su<br/>suitable material and dispose of prop</li> </ul> | barrier with sand, earth<br>pent.<br>uch as clay, sand or other |  |  |

### 6.4 Reference to other sections

For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

### **SECTION 7: Handling and storage**

| General Precautions :                | Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.<br>Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.               |
|--------------------------------------|---|
| 7.1 Precautions for safe handling    |   |
| Advice on safe handling :            | Avoid prolonged or repeated contact with skin.<br>Avoid inhaling vapour and/or mists.<br>When handling product in drums, safety footwear should be<br>worn and proper handling equipment should be used.<br>Properly dispose of any contaminated rags or cleaning<br>materials in order to prevent fires. |
| Product Transfer :                   | This material has the potential to be a static accumulator.<br>Proper grounding and bonding procedures should be used<br>during all bulk transfer operations.   |
| 7.2 Conditions for safe storage, inc | luding any incompatibilities  |
| Other data :                         | Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.   |
| Storage temperature :                | -50 - 50 °C   |
|                                      | Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.   |
| 5/19                                 | 80000100032   |

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|                         | The storage of this product may be su<br>Pollution (Oil Storage) (England) Regu<br>guidance may be obtained from the lo<br>agency office. | ulations. Further          |
| Packaging material      | : Suitable material: For containers or co<br>steel or high density polyethylene.<br>Unsuitable material: PVC.                             | ontainer linings, use mild |
| Container Advice        | : Polyethylene containers should not be temperatures because of possible risk   |                            |
| 7.3 Specific end use(s) |   |                            |
| Specific use(s)         | : Not applicable  |                            |

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

### 8.1 Control parameters

### Occupational Exposure Limits

| Components               | CAS-No.   | Value type (Form of exposure) | Control parameters | Basis                                  |
|--------------------------|---|-------------------------------|--------------------|--|
| Oil mist, mineral        |   | TWA                           | 5 mg/m3            | US. ACGIH<br>Threshold<br>Limit Values |
| Butylated hydroxytoluene | 128-37-0  | TWA                           | 10 mg/m3           | GB EH40                                |
| Further information      | Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used |                               |                    |  |

#### **Biological occupational exposure limits**

No biological limit allocated.

#### **Monitoring Methods**

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

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Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

#### 8.2 Exposure controls

**Engineering measures** The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Do not ingest. If swallowed then seek immediate medical assistance

#### Personal protective equipment

The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

 Eye protection
 : If material is handled such that it could be splashed into eyes, protective eyewear is recommended. Approved to EU Standard EN166.

 Hand protection
 :

 Remarks
 : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide

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|                          | suitable chemical protection. PVC<br>gloves Suitability and durability of<br>usage, e.g. frequency and duration<br>resistance of glove material, dexter<br>from glove suppliers. Contaminate<br>replaced. Personal hygiene is a ker<br>care. Gloves must only be worn or<br>gloves, hands should be washed a<br>Application of a non-perfumed mo  | a glove is dependent on<br>n of contact, chemical<br>erity. Always seek advice<br>ed gloves should be<br>ey element of effective hand<br>n clean hands. After using<br>and dried thoroughly.  |
|                          | For continuous contact we recomme<br>breakthrough time of more than 24<br>for > 480 minutes where suitable of<br>short-term/splash protection we re-<br>recognize that suitable gloves offer<br>may not be available and in this ca-<br>time maybe acceptable so long as<br>and replacement regimes are follo<br>a good predictor of glove resistant<br>dependent on the exact compositi<br>Glove thickness should be typicall<br>depending on the glove make and   | 40 minutes with preference<br>gloves can be identified. For<br>commend the same, but<br>ering this level of protection<br>ase a lower breakthrough<br>appropriate maintenance<br>owed. Glove thickness is not<br>ce to a chemical as it is<br>on of the glove material.<br>y greater than 0.35 mm |
| Skin and body protection | : Skin protection is not ordinarily red<br>work clothes.<br>It is good practice to wear chemica   |   |
| Respiratory protection   | <ul> <li>No respiratory protection is ordinal conditions of use.</li> <li>In accordance with good industrial precautions should be taken to avoid fengineering controls do not mair concentrations to a level which is a health, select respiratory protection specific conditions of use and mee Check with respiratory protective of Where air-filtering respirators are appropriate combination of mask a Select a filter suitable for combine and vapors [Type A/Type P boiling meeting EN14387 and EN143.</li> </ul> | I hygiene practices,<br>oid breathing of material.<br>ntain airborne<br>adequate to protect worker<br>n equipment suitable for the<br>eting relevant legislation.<br>equipment suppliers.<br>suitable, select an<br>and filter.<br>d particulate/organic gases                                    |
| Thermal hazards          | : Not applicable  |   |
| Hygiene measures         | : Exposure to this product should be<br>reasonably practicable. Reference<br>Health and Safety Executive's pub<br>Essentials".  | e should be made to the   |

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### **Environmental exposure controls**

| General advice | <ul> <li>Take appropriate measures to fulfill the requirements of<br/>relevant environmental protection legislation. Avoid<br/>contamination of the environment by following advice given in<br/>Chapter 6. If necessary, prevent undissolved material from<br/>being discharged to waste water. Waste water should be<br/>treated in a municipal or industrial waste water treatment plant<br/>before discharge to surface water.</li> <li>Local guidelines on emission limits for volatile substances<br/>must be observed for the discharge of exhaust air containing<br/>vapour.</li> </ul> |
|----------------|---|
|----------------|---|

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

| Appearance                              | : | Liquid at room temperature.                |
|---|---|--|
| Colour                                  | : | light yellow                               |
| Odour Threshold                         | : | Data not available                         |
| рН                                      | : | Not applicable                             |
| pour point                              | : | <= -57 °CMethod: Unspecified               |
| Initial boiling point and boiling range | : | > 280 °Cestimated value(s)                 |
| Flash point                             | : | 154 °C<br>Method: Unspecified              |
| Evaporation rate                        | : | Data not available                         |
| Flammability (solid, gas)               | : | Data not available                         |
| Upper explosion limit                   | : | Typical 10 %(V)                            |
| Lower explosion limit                   | : | Typical 1 %(V)                             |
| Vapour pressure                         | : | < 0.5 Pa (20 °C)<br>estimated value(s)     |
| Relative vapour density                 | : | > 1estimated value(s)                      |
| Relative density                        | : | 0.875 (15 °C)                              |
| Density                                 | : | 875 kg/m3 (15.0 °C)<br>Method: Unspecified |

Solubility(ies)

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| Water solubility                           | : negligible                                  |                       |
| Solubility in other solvents               | : Data not available                          |                       |
| Partition coefficient: n-<br>octanol/water | : Pow: > 6(based on information on similar    | products)             |
| Auto-ignition temperature                  | : ><br>320 °C                                 |                       |
| Viscosity                                  |   |                       |
| Viscosity, dynamic                         | : Data not available                          |                       |
| Viscosity, kinematic                       | : 10.5 mm2/s (37.8 °C)<br>Method: Unspecified |                       |
| Explosive properties                       | : Not classified                              |                       |
| Oxidizing properties                       | : Data not available                          |                       |
| 9.2 Other information                      |   |                       |

| Conductivity              | : This material is not expected to be a static accumulator. |
|---------------------------|---|
| Decomposition temperature | : Data not available  |

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

### **10.2 Chemical stability**

Stable.

No hazardous reaction is expected when handled and stored according to provisions.

### 10.3 Possibility of hazardous reactions

| Hazardous reactions  | : | Reacts with strong oxidising agents.                               |
|--|---|--|
| <b>10.4 Conditions to avoid</b><br>Conditions to avoid           | : | Extremes of temperature and direct sunlight.                       |
| <b>10.5 Incompatible materials</b><br>Materials to avoid         | : | Strong oxidising agents.   |
| <b>10.6 Hazardous decomposition p</b><br>Hazardous decomposition |   | ducts<br>Hazardous decomposition products are not expected to form |
|  |   |  |

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| products                                 |       | during normal storage.  |  |
| ECTION 11: Toxicological ir              | nfor  | mation  |  |
| 1.1 Information on toxicologica          | al ef | fects   |  |
| Basis for assessment                     | :     | Information given is based on data on the toxicology of similar products.Unlest the data presented is representative of whole, rather than for individual comport | s indicated otherwise,<br>the product as a |
| Information on likely routes of exposure | f:    | Skin and eye contact are the primary ro although exposure may occur following   |  |
| cute toxicity                            |       |   |  |
| Product:                                 |       |   |  |
| Acute oral toxicity                      | :     | LD50 rat: > 5,000 mg/kg<br>Remarks: Expected to be of low toxicity  | :  |
|  |       | Remarks: Aspiration into the lungs may pneumonitis which can be fatal.  | cause chemical                             |
| Acute inhalation toxicity                | :     | Remarks: Not considered to be an inha normal conditions of use.   | lation hazard under                        |
| Acute dermal toxicity                    |       | LD50 Rabbit: > 5,000 mg/kg  |  |

### Skin corrosion/irritation

### Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

### Serious eye damage/eye irritation

### Product:

Remarks: Expected to be slightly irritating.

### Respiratory or skin sensitisation

### Product:

Remarks: For respiratory and skin sensitisation:, Not expected to be a sensitiser.

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#### Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

#### Carcinogenicity

#### Product:

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skinpainting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

| Material                   | GHS/CLP Carcinogenicity Classification |  |
|----------------------------|--|--|
| Highly refined mineral oil | No carcinogenicity classification.     |  |
| Butylated hydroxytoluene   | No carcinogenicity classification.     |  |

#### Reproductive toxicity

#### Product:

Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

#### STOT - single exposure

#### Product:

Remarks: Not expected to be a hazard.

#### STOT - repeated exposure

#### Product:

Remarks: Not expected to be a hazard.

#### Aspiration toxicity

#### Product:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

### **Further information**

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#### Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Slightly irritating to respiratory system.

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

| Summary on evaluation of   | the CMR properties                          |
|----------------------------|---|
| ourinnary on ovaluation of |   |
| Corm coll mutagonicity     | <ul> <li>This product doos not a</li> </ul> |

| Germ cell mutagenicity-<br>Assessment | : This product does not meet the criteria for classification in categories 1A/1B. |  |
|---------------------------------------|---|--|
| Carcinogenicity -<br>Assessment       | : This product does not meet the criteria for classification in categories 1A/1B. |  |
| Reproductive toxicity -<br>Assessment | : This product does not meet the criteria for classification in categories 1A/1B. |  |

### **SECTION 12: Ecological information**

### 12.1 Toxicity

| Basis for assessment                              | : | Ecotoxicological data have not been determined specifically<br>for this product.<br>Information given is based on a knowledge of the components<br>and the ecotoxicology of similar products.<br>Unless indicated otherwise, the data presented is<br>representative of the product as a whole, rather than for<br>individual component(s).(LL/EL/IL50 expressed as the<br>nominal amount of product required to prepare aqueous test<br>extract.) |
|---|---|--|
| Toxicity to fish (Acute toxicity)                 | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/I   |
| Toxicity to crustacean (Acute toxicity)           | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/I   |
| Toxicity to algae/aquatic plants (Acute toxicity) | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/I   |
| Toxicity to fish (Chronic toxicity)               |   | Remarks: Data not available  |

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| Toxicity to crustacean (Chronic toxicity)        | : Remarks: Data not available   |   |
| Toxicity to microorganisms<br>(Acute toxicity)   | :<br>Remarks: Data not available  |   |
| <u>Components:</u><br>Butylated hydroxytoluene : |   |   |
| M-Factor (Acute aquatic toxicity)                | : 1   |   |
| 12.2 Persistence and degradabili                 | y   |   |
| Product:   |   |   |
| Biodegradability                                 | constituents are expected to  | t readily biodegradable., Major<br>be inherently biodegradable, but<br>ay persist in the environment. |
| 12.3 Bioaccumulative potential                   |   |   |
| Product:   |   |   |
| Bioaccumulation                                  | : Remarks: Contains compone bioaccumulate.  | ents with the potential to  |
| Partition coefficient: n-<br>octanol/water       | Pow: > 6Remarks: (based on information on similar products)   |   |
| 12.4 Mobility in soil                            |   |   |
| Product:   |   |   |
| Mobility   | : Remarks: Liquid under most<br>enters soil, it will adsorb to s<br>mobile.<br>Remarks: Floats on water.  | environmental conditions., If it oil particles and will not be  |
| 12.5 Results of PBT and vPvB as                  | sessment  |   |
| Product:   |   |   |
| Assessment                                       | : This mixture does not contai<br>substances that are assessed  |   |
| 12.6 Other adverse effects                       |   |   |
| Product:   |   |   |
| Additional ecological<br>information             | expected to be released to a<br>Not expected to have ozone<br>photochemical ozone creatio<br>potential.<br>Poorly soluble mixture., May<br>organisms. | on potential or global warming<br>cause physical fouling of aquatic<br>o cause any chronic effects to |

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### **SECTION 13: Disposal considerations**

| 13.1 Waste treatment methods           |   |
|--|---|
| Product :                              | Recover or recycle if possible.<br>It is the responsibility of the waste generator to determine the<br>toxicity and physical properties of the material generated to<br>determine the proper waste classification and disposal<br>methods in compliance with applicable regulations.<br>Do not dispose into the environment, in drains or in water<br>courses |
| Contaminated packaging :               | Dispose in accordance with prevailing regulations, preferably<br>to a recognized collector or contractor. The competence of<br>the collector or contractor should be established beforehand.<br>Disposal should be in accordance with applicable regional,<br>national, and local laws and regulations.   |
| Local legislation<br>Waste catalogue : | EU Waste Disposal Code (EWC):   |
| Waste Code :                           | 13 02 05*   |
| Remarks :                              | Disposal should be in accordance with applicable regional, national, and local laws and regulations.  |
|  | Classification of waste is always the responsibility of the end user.   |
|  | Hazardous Waste (England and Wales) Regulations 2005.   |

# **SECTION 14: Transport information**

| 14.1 UN number |                                     |
|----------------|-------------------------------------|
| ADR            | : Not regulated as a dangerous good |
| RID            | : Not regulated as a dangerous good |
| IMDG           | : Not regulated as a dangerous good |
| ΙΑΤΑ           | : Not regulated as a dangerous good |
|                |                                     |

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|----------------------------------|--|-----------------------|
| 14.2 Proper shipping name        |  |                       |
|                                  | . Not regulated as a deparation good   |                       |
| ADR                              | : Not regulated as a dangerous good  |                       |
| RID<br>IMDG                      | : Not regulated as a dangerous good  |                       |
| IATA                             | <ul> <li>Not regulated as a dangerous good</li> <li>Not regulated as a dangerous good</li> </ul> |                       |
|                                  | . Not regulated as a daligerous good   |                       |
| 14.3 Transport hazard class      |  |                       |
| ADR                              | : Not regulated as a dangerous good  |                       |
| RID                              | : Not regulated as a dangerous good  |                       |
| IMDG                             | : Not regulated as a dangerous good  |                       |
| ΙΑΤΑ                             | : Not regulated as a dangerous good  |                       |
| 14.4 Packing group               |  |                       |
| ADR                              | : Not regulated as a dangerous good  |                       |
| RID                              | : Not regulated as a dangerous good  |                       |
| IMDG                             | : Not regulated as a dangerous good  |                       |
| ΙΑΤΑ                             | : Not regulated as a dangerous good  |                       |
| 14.5 Environmental hazards       |  |                       |
| ADR                              | : Not regulated as a dangerous good  |                       |
| RID                              | : Not regulated as a dangerous good  |                       |
| IMDG                             | : Not regulated as a dangerous good  |                       |
| 14.6 Special precautions for us  | ser  |                       |
| Remarks                          | : Special Precautions: Refer to Chapter  |                       |
|                                  | for special precautions which a user ne  |                       |
|                                  | needs to comply with in connection with  | n transport.          |
| 14.7 Transport in bulk according | ng to Annex II of MARPOL 73/78 and the IB  | C Code                |
| Pollution category               | : Not applicable   |                       |
| Ship type                        | : Not applicable   |                       |
| Product name                     | : Not applicable   |                       |
| Special precautions              | : Not applicable   |                       |
| Additional Information           | : MARPOL Annex 1 rules apply for bulk  | shipments by sea.     |

# **SECTION 15: Regulatory information**

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

| REACH - List of substances s<br>(Annex XIV) | ubject to authorisation : Product is not subject to<br>Authorisation under REACH.  |   |
|---|--|---|
| Volatile organic compounds                  | : 0%   |   |
| Other regulations                           | : Environmental Protection Act 1990 (as amended). Health and<br>Safety at Work etc. Act 1974. Consumers Protection Act 1987.<br>Pollution Prevention and Control Act 1999. Environment Act<br>1995. Factories Act 1961. The Carriage of Dangerous Goods<br>and Use of Transportable Pressure Equipment (Amendment) |   |
| · / 19                                      | 80000100032  | > |

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|             | Regulations 2011. Chemicals (Haza<br>Packaging for Supply) Regulations 2<br>Substances Hazardous to Health Re<br>amended). Merchant Shipping (Dan<br>Pollutants) Regulations 1997. Repo<br>and Dangerous Occurrences Regula<br>Personal Protective Equipment Reg<br>Protective Equipment at Work Regula<br>Waste (England and Wales) Regula<br>Control of Major Accident Hazards F<br>amended). Renewable Transport Fu<br>(as amended). Energy Act 2011. En<br>(England and Wales) Regulations 2<br>(England and Wales) Regulations 2<br>Planning (Hazardous Substances) A<br>regulations. The Environmental Prot<br>Ozone-Depleting Substances) Regu | 2009. Control of<br>egulations 2002 (as<br>gerous Goods and Marine<br>rting of Injuries, Diseases<br>ations 1995 (as amended).<br>ulations 2002. Personal<br>lations 1992. Hazardous<br>tions 2005(as amended).<br>Regulations 1999 (as<br>uel Obligations Order 2007<br>wironmental Permitting<br>010 (as amended). Waste<br>011 (as amended).<br>Act 1990 and associated<br>tection (Controls on |

### The components of this product are reported in the following inventories:

| EINECS | : | All components listed or polymer exempt. |
|--------|---|--|
| TSCA   | : | All components listed.                   |

### **15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

### **SECTION 16: Other information**

| <b>REGULATION (EC) No</b><br>Aspiration hazard, Cate                    |   | Classification procedure:<br>Expert judgement and weight of evidence<br>determination. |
|---|---|--|
| Chronic aquatic toxicity<br>H412  | , Category 3,                                   | Expert judgement and weight of evidence determination.                                 |
| Full text of R-Phrases<br>R50/53  |   | ic organisms, may cause long-term adverse effects in ment.                             |
| Full text of H-Stateme<br>H304<br>H400<br>H410                          | May be fatal if swa<br>Very toxic to aquat      | llowed and enters airways.<br>ic life.<br>ic life with long lasting effects.           |
| Full text of other abbr   | eviations                                       |  |
| Aquatic Acute<br>Aquatic Chronic<br>Asp. Tox.<br>Abbreviations and Acro | Aspiration hazard<br>nyms : The stan<br>documen |  |

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|                  |   |                               |
|                  | ACGIH = American Conference of                                    | of Governmental Industrial    |
|                  | Hygienists  |                               |
|                  | ADR = European Agreement cor                                      | cerning the International     |
|                  | Carriage of Dangerous Goods by                                    |                               |
|                  | AICS = Australian Inventory of C                                  |                               |
|                  | ASTM = American Society for Te                                    | esting and Materials          |
|                  | BEL = Biological exposure limits                                  |                               |
|                  | BTEX = Benzene, Toluene, Ethy<br>CAS = Chemical Abstracts Servi   |                               |
|                  | CEFIC = European Chemical Ind                                     |                               |
|                  | CLP = Classification Packaging a                                  |                               |
|                  | COC = Cleveland Open-Cup  |                               |
|                  | DIN = Deutsches Institut fur Norr                                 | muna                          |
|                  | DMEL = Derived Minimal Effect L                                   |                               |
|                  | DNEL = Derived No Effect Level                                    |                               |
|                  | DSL = Canada Domestic Substa                                      | nce List                      |
|                  | EC = European Commission  |                               |
|                  | EC50 = Effective Concentration f                                  |                               |
|                  | ECETOC = European Center on                                       | Ecotoxicology and             |
|                  | Toxicology Of Chemicals   |                               |
|                  | ECHA = European Chemicals Ag<br>EINECS = The European Invento     |                               |
|                  | Chemical Substances   | bry of Existing Commercial    |
|                  | EL50 = Effective Loading fifty                                    |                               |
|                  | ENCS = Japanese Existing and I                                    | New Chemical Substances       |
|                  | Inventory   |                               |
|                  | EWC = Éuropean Waste Code   |                               |
|                  | GHS = Globally Harmonised Sys                                     | tem of Classification and     |
|                  | Labelling of Chemicals  |                               |
|                  | IARC = International Agency for                                   |                               |
|                  | IATA = International Air Transpor                                 |                               |
|                  | IC50 = Inhibitory Concentration fi                                | шту                           |
|                  | IL50 = Inhibitory Level fifty<br>IMDG = International Maritime Da | anderous Goods                |
|                  | INV = Chinese Chemicals Invent                                    |                               |
|                  | IP346 = Institute of Petroleum te                                 |                               |
|                  | determination of polycyclic aroma                                 |                               |
|                  | KECI = Korea Existing Chemical                                    |                               |
|                  | LC50 = Lethal Concentration fifty                                 |                               |
|                  | LD50 = Lethal Dose fifty per cent                                 |                               |
|                  | LL/EL/IL = Lethal Loading/Effecti                                 | ve Loading/Inhibitory loading |
|                  | LL50 = Lethal Loading fifty                                       | tion for the Dreventing of    |
|                  | MARPOL = International Conven                                     | ition for the Prevention of   |
|                  | Pollution From Ships<br>NOEC/NOEL = No Observed Eff               | ect Concentration / No        |
|                  | Observed Effect Level   |                               |
|                  | OBSEIVED Effect Level<br>OE_HPV = Occupational Exposu             | re - High Production Volume   |
|                  | PBT = Persistent, Bioaccumulativ                                  |                               |
|                  | PICCS = Philippine Inventory of                                   |                               |
|                  | Substances  |                               |

Substances

PNEC = Predicted No Effect Concentration REACH = Registration Evaluation And Authorisation Of

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|                     | Chemicals<br>RID = Regulations Relating to Interna<br>Dangerous Goods by Rail<br>SKIN_DES = Skin Designation<br>STEL = Short term exposure limit<br>TRA = Targeted Risk Assessment<br>TSCA = US Toxic Substances Contr<br>TWA = Time-Weighted Average<br>vPvB = very Persistent and very Bios   | ol Act                |
| Further information |   |                       |
| Other information   | : This product is classified as H304 (May be fatal if swallowed<br>and enters airways). The risk relates to potential for aspiration.<br>The risk arising from aspiration hazard is solely related to the<br>physico-chemical properties of the substance. The risk can<br>therefore be controlled by implementing risk management<br>measures tailored to this specific hazard and included within<br>Chapter 8 of the SDS. An exposure scenario is not presented. |                       |
|                     | A vertical bar () in the left margin indicates an amendment from the previous version.  |                       |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.