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

### 1.1 Product identifier

| | | |
|---|---|---|
| Trade name | : | Shell Spirax S6 AXME 75W-140 |
| Product code | : | 001D8291 |

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

| | | |
|---|---|---|
| Use of the Substance/Mixture | : | Transmission oil. |
| Uses advised against | : | This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier. |

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

| | | |
|---|---|---|
| Manufacturer/Supplier | : | **Shell UK Oil Products Limited**<br>Shell Centre<br>London<br>SE1 7NA<br>United Kingdom |
| Telephone | : | (+44) 08007318888 |
| Telefax | : | |
| Email Contact for Safety Data 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)**

| | |
|---|---|
| Chronic aquatic toxicity , Category 3 | H412: Harmful to aquatic life with long lasting effects. |

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

| | |
|---|---|
| Dangerous for the environment | R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

| | | | |
|---|---|---|---|
| Hazard pictograms | : | No Hazard Symbol required | |
| Signal word | : | No signal word | |
| Hazard statements | : | | PHYSICAL HAZARDS:<br>Not classified as a physical hazard according to CLP criteria.<br>HEALTH HAZARDS:<br>Not classified as a health hazard under CLP criteria.<br>ENVIRONMENTAL HAZARDS: |
| | | H412 | Harmful to aquatic life with long lasting effects. |

| | | | |
|---|---|---|---|
| Precautionary statements | : | **Prevention:** | |
| | | P273 | Avoid release to the environment. |
| | | **Response:** | |
| | | | No precautionary phrases. |
| | | **Storage:** | |
| | | | No precautionary phrases. |
| | | **Disposal:** | |
| | | 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 : Blend of polyolefins, synthetic esters and additives.
Highly refined mineral oil.
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.
The highly refined mineral oil is only present as additive diluent.

: * contains one or more of the following CAS-numbers (REACH registration numbers): 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-65-0 (01-2119471299-27), 68037-01-4 (01-2119486452-34), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-

2119474889-13), 8042-47-5 (01-2119487078-27), 848301-69-9 (01-0000020163-82).

**Hazardous components**

| Chemical Name | CAS-No.<br>EC-No.<br>Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|---|---|---|---|---|
| Alkyl dithiophosphate | | Xi-N; R36-R50/53 | Eye Irrit.2; H319<br>Aquatic Acute1; H400<br>Aquatic Chronic1; H410 | 0.1 - 0.9 |
| Alkyl phosphonate | | Xi-N; R38-R41-R51/53 | Skin Irrit.2; H315<br>Eye Dam.1; H318<br>Aquatic Chronic2; H411 | 0.1 - 0.9 |
| Long-chain alkenyl amine | | Xn-C-N; R22-R35-R50 | Acute Tox.4; H302<br>Skin Corr.1B; H314<br>Aquatic Acute1; H400 | 0.1 - 0.5 |
| Interchangeable low viscosity base oil (<20,5 cSt @40°C) * | | | Asp. Tox.1; H304 | 0 - 90 |

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Not expected to be a health hazard when used under normal conditions.

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.
If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.
If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

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

| | | |
|---|---|---|
| Symptoms | : | Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea. |

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

| | | |
|---|---|---|
| Treatment | : | Notes to doctor/physician:<br>Treat symptomatically. |

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

| | | |
|---|---|---|
| Suitable extinguishing media | : | Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
| Unsuitable extinguishing media | : | Do not use water in a jet. |

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

| | | |
|---|---|---|
| Specific hazards during firefighting | : | Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds. |

**5.3 Advice for firefighters**

| | | |
|---|---|---|
| Special protective equipment for firefighters | : | Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to 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:<br>Avoid contact with skin and eyes.<br>6.1.2 For emergency responders:<br>Avoid contact with skin and eyes. |

**6.2 Environmental precautions**

Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages cannot be contained.

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

Methods for cleaning up : Slippery when spilt. Avoid accidents, clean up immediately.
Prevent from spreading by making a barrier with sand, earth or other containment material.
Reclaim liquid directly or in an absorbent.
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

### 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.
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.
Avoid inhaling vapour and/or mists.
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Product Transfer : This material has the potential to be a static accumulator.
Proper grounding and bonding procedures should be used during all bulk transfer operations.

### 7.2 Conditions for safe storage, including any incompatibilities

Other data : Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.

Store at ambient temperature.

Refer to section 15 for any additional specific legislation

covering the packaging and storage of this product.

The storage of this product may be subject to the Control of Pollution (Oil Storage) (England) Regulations. Further guidance may be obtained from the local environmental agency office.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.
Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

**7.3 Specific end use(s)**

## 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 Threshold Limit Values |

**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/

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.

**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.<br>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 suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. |

Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
Check with respiratory protective equipment suppliers.
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
Select a filter suitable for combined particulate/organic gases and vapors [Type A/Type P boiling point > 65°C (149°F)] meeting EN14387 and EN143.

Thermal hazards : Not applicable

Hygiene measures : Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".

**Environmental exposure controls**

General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant

before discharge to surface water.
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | Liquid at room temperature. |
| Colour | : | amber |
| Odour | : | Slight hydrocarbon |
| Odour Threshold | : | Data not available |
| pH | : | Not applicable |
| pour point | : | -45 °CMethod: ISO 3016 |
| Initial boiling point and boiling range | : | > 280 °Cestimated value(s) |
| Flash point | : | 210 °C<br>Method: ISO 2592 |
| 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 | : | 0.869 (15 °C) |
| Density | : | 869 kg/m3 (15.0 °C)<br>Method: ISO 12185 |
| Solubility(ies) | | |
| Water solubility | : | negligible |
| Solubility in other solvents | : | Data not available |
| Partition coefficient: n-octanol/water | : | Pow: > 6(based on information on similar products) |

| | | |
|---|---|---|
| Auto-ignition temperature | : | > 320 °C |
| Viscosity | | |
| Viscosity, dynamic | : | Data not available |
| Viscosity, kinematic | : | 172.4 mm2/s (40.0 °C)<br>Method: ISO 3104<br><br>24.5 mm2/s (100 °C)<br>Method: ISO 3104 |
| 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. |

### 10.4 Conditions to avoid

| | | |
|---|---|---|
| Conditions to avoid | : | Extremes of temperature and direct sunlight. |

### 10.5 Incompatible materials

| | | |
|---|---|---|
| Materials to avoid | : | Strong oxidising agents. |

### 10.6 Hazardous decomposition products

| | | |
|---|---|---|
| Hazardous decomposition products | : | Hazardous decomposition products are not expected to form during normal storage. |

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

| | | |
|---|---|---|
| Basis for assessment | : | Information given is based on data on the components and the toxicology of similar products.Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s). |
| Information on likely routes of exposure | : | Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion. |

**Acute toxicity**

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 rat: > 5,000 mg/kg<br>Remarks: Expected to be of low toxicity: |
| Acute inhalation toxicity | : | Remarks: Not considered to be an inhalation hazard under normal conditions of use. |
| Acute dermal toxicity | : | LD50 Rabbit: > 5,000 mg/kg<br>Remarks: Expected to be of low toxicity: |

**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.

**Germ cell mutagenicity**

**Product:**

: Remarks: Not considered a mutagenic hazard.

**Carcinogenicity**

**Product:**

Remarks: Not expected to be carcinogenic.

| Material | GHS/CLP Carcinogenicity Classification |
|---|---|
| Highly refined mineral oil | 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:**

Not considered an aspiration hazard.

**Further information**

**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**
Germ cell mutagenicity-Assessment : This product does not meet the criteria for classification in categories 1A/1B.

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | This product does not meet the criteria for classification in categories 1A/1B. |
| Reproductive toxicity - 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 for this product.<br>Information given is based on a knowledge of the components and the ecotoxicology of similar products.<br>Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract). |

**Product:**

| | | |
|---|---|---|
| Toxicity to fish (Acute toxicity) | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/l |
| Toxicity to crustacean (Acute toxicity) | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/l |
| Toxicity to algae/aquatic plants (Acute toxicity) | : | Remarks: Expected to be harmful:<br>LL/EL/IL50 10-100 mg/l |
| Toxicity to fish (Chronic toxicity) | : | Remarks: Data not available |
| Toxicity to crustacean (Chronic toxicity) | : | Remarks: Data not available |
| Toxicity to microorganisms (Acute toxicity) | : | Remarks: Data not available |

### 12.2 Persistence and degradability

**Product:**

| | | |
|---|---|---|
| Biodegradability | : | Remarks: Expected to be not readily biodegradable., Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment. |

### 12.3 Bioaccumulative potential

**Product:**

| | | |
|---|---|---|
| Bioaccumulation | : | Remarks: Contains components with the potential to bioaccumulate. |
| Partition coefficient: n-octanol/water | : | Pow: > 6Remarks: (based on information on similar products) |

### 12.4 Mobility in soil

**Product:**

| | | |
|---|---|---|
| Mobility | : | Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile.<br>Remarks: Floats on water. |

### 12.5 Results of PBT and vPvB assessment

**Product:**

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

### 12.6 Other adverse effects

**Product:**

| | | |
|---|---|---|
| Additional ecological information | : | Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities., Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.<br>Poorly soluble mixture., May cause physical fouling of aquatic organisms. |

## 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 toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.<br>Do not dispose into the environment, in drains or in water courses |
| Contaminated packaging | : | Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations. |

Local legislation
Waste catalogue :

EU Waste Disposal Code (EWC):

Waste Code :

13 02 06*

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
**IATA** : Not regulated as a dangerous good

**14.2 Proper shipping name**

**ADR** : Not regulated as a dangerous good
**RID** : Not regulated as a dangerous good
**IMDG** : Not regulated as a dangerous good
**IATA** : Not regulated as a dangerous 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
**IATA** : 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
**IATA** : 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 user**

Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC 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 subject to authorisation (Annex XIV) : Product is not subject to Authorisation under REACH.

Volatile organic compounds : 0 %

Other regulations : Environmental Protection Act 1990 (as amended). Health and Safety at Work etc. Act 1974. Consumers Protection Act 1987. Pollution Prevention and Control Act 1999. Environment Act 1995. Factories Act 1961. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005(as amended). Control of Major Accident Hazards Regulations 1999 (as amended). Renewable Transport Fuel Obligations Order 2007 (as amended). Energy Act 2011. Environmental Permitting (England and Wales) Regulations 2010 (as amended). Waste (England and Wales) Regulations 2011 (as amended). Planning (Hazardous Substances) Act 1990 and associated regulations. The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011.

**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

| REGULATION (EC) No 1272/2008 | Classification procedure: |
|---|---|
| Chronic aquatic toxicity, Category 3, H412 | Expert judgement and weight of evidence determination. |

**Full text of R-Phrases**

| | |
|---|---|
| R22 | Also harmful if swallowed. |
| R35 | Causes severe burns. |
| R36 | Irritating to eyes. |
| R38 | Irritating to skin. |
| R41 | Risk of serious damage to eyes. |
| R50 | Very toxic to aquatic organisms. |
| 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 H-Statements**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| 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 other abbreviations**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Asp. Tox. | Aspiration hazard |
| Eye Dam. | Serious eye damage |
| Eye Irrit. | Eye irritation |
| Skin Corr. | Skin corrosion |
| Skin Irrit. | Skin irritation |

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial Hygienists
ADR = European Agreement concerning the International

Carriage of Dangerous Goods by Road
AICS = Australian Inventory of Chemical Substances
ASTM = American Society for Testing and Materials
BEL = Biological exposure limits
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
CAS = Chemical Abstracts Service
CEFIC = European Chemical Industry Council
CLP = Classification Packaging and Labelling
COC = Cleveland Open-Cup
DIN = Deutsches Institut fur Normung
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
DSL = Canada Domestic Substance List
EC = European Commission
EC50 = Effective Concentration fifty
ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals
ECHA = European Chemicals Agency
EINECS = The European Inventory of Existing Commercial Chemical Substances
EL50 = Effective Loading fifty
ENCS = Japanese Existing and New Chemical Substances Inventory
EWC = European Waste Code
GHS = Globally Harmonised System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IC50 = Inhibitory Concentration fifty
IL50 = Inhibitory Level fifty
IMDG = International Maritime Dangerous Goods
INV = Chinese Chemicals Inventory
IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables
KECI = Korea Existing Chemicals Inventory
LC50 = Lethal Concentration fifty
LD50 = Lethal Dose fifty per cent.
LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading
LL50 = Lethal Loading fifty
MARPOL = International Convention for the Prevention of Pollution From Ships
NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level
OE_HPV = Occupational Exposure - High Production Volume
PBT = Persistent, Bioaccumulative and Toxic
PICCS = Philippine Inventory of Chemicals and Chemical Substances
PNEC = Predicted No Effect Concentration
REACH = Registration Evaluation And Authorisation Of Chemicals
RID = Regulations Relating to International Carriage of Dangerous Goods by Rail
SKIN_DES = Skin Designation

STEL = Short term exposure limit
TRA = Targeted Risk Assessment
TSCA = US Toxic Substances Control Act
TWA = Time-Weighted Average
vPvB = very Persistent and very Bioaccumulative

**Further information**

Other information : No Exposure Scenario annex is attached to this safety data sheet. It is a non-classified mixture containing hazardous substances as detailed in Section 3; relevant information from Exposure Scenarios for the hazardous substances contained have been integrated into the core sections 1-16 of this SDS.

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.