## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

| | | |
|---|---|---|
| Product name | : | NEODOL 91 |
| Product code | : | V2729, V2746, V2766 |
| CAS-No. | : | 68603-15-6 |
| Other means of identification | : | Alcohols, C9-11, Alcohols, C9-11 branched and linear |

### 1.2 Identified relevant uses of the substance or mixture and restrictions on use

**Recommended use of the chemical and restrictions on use**

| | | |
|---|---|---|
| Recommended use | : | Use in detergent manufacture. |
| Restrictions on use | : | This product must not be used in applications other than the above without first seeking the advice of the supplier.<br>This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier. |
| Other information | : | NEODOL is a trademark owned by Shell Trademark Management B.V. and Shell Brands Inc. and used by affiliates of Royal Dutch Shell plc. |

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

**Manufacturer or supplier's details**

| | | |
|---|---|---|
| Manufacturer/Supplier | : | **SHELL EASTERN CHEMICALS (S)**<br>A REGISTERED BUSINESS OF SHELL EASTERN TRADING (PTE) LTD (UEN:198902087C)<br>9 North Buona Vista Drive , #07-01<br>The Metropolis Tower 1<br>Singapore 138588<br>Singapore |
| Telephone | : | +65 6384 8269 |
| Telefax | : | +65 6384 8454 |

### 1.4 Emergency telephone number

| | | |
|---|---|---|
| Emergency telephone number | : | +65 6542 9595 (Alert-SGS) |

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| | | |
|---|---|---|
| Substance / Mixture | : | Substance |

**Hazardous components**

| Chemical name | CAS-No.<br>EC-No.<br>Registration number | Classification (REGULATION (EC) No 1272/2008) | Concentration (% w/w) |
|---|---|---|---|
| Alcohols, C9-11 | 68603-15-6 | Skin Irrit. 2; H315<br>Eye Irrit. 2; H319<br>Aquatic Chronic 3; H412<br>EUH066 | 100 |

For explanation of abbreviations see section 16.

## 3. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Skin irritation : Category 2
Eye irritation : Category 2
Long-term (chronic) aquatic hazard : Category 3
Supplemental Hazard Statements :

### 2.2 Label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : PHYSICAL HAZARDS:
Not classified as a physical hazard according to CLP criteria.
HEALTH HAZARDS:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
ENVIRONMENTAL HAZARDS:
H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements : **Prevention:**
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P273 Avoid release to the environment.
**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
**Storage:**
P405 Store locked up.
**Disposal:**
P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Other hazards**

Slightly irritating to respiratory system.
Harmful: May cause lung damage if swallowed.

## 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. |
| If inhaled | : | No treatment necessary under normal conditions of use.<br>If symptoms persist, obtain medical advice. |
| In case of skin contact | : | Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses, if present and easy to do. Continue rinsing.<br>Transport to the nearest medical facility for additional treatment. |
| If swallowed | : | If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.<br>If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. |

### 4.2 Protection of first-aiders

| | | |
|---|---|---|
| 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. |

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

| | | |
|---|---|---|
| Most important symptoms and effects, both acute and delayed | : | If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.<br>If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.<br>Skin irritation signs and symptoms may include a burning sensation, redness, or swelling.<br>Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.<br>Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.<br>Not considered to be an inhalation hazard under normal conditions of use.<br>Possible respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. |
| Notes to physician | : | IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!<br>Call a doctor or poison control center for guidance.<br>Potential for chemical pneumonitis.<br>Treat symptomatically. |

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

| | | |
|---|---|---|
| Suitable extinguishing media | : | Alcohol-resistant 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 | : | Carbon monoxide may be evolved if incomplete combustion occurs.<br>Will float and can be reignited on surface water.<br>The vapour is heavier than air, spreads along the ground and distant ignition is possible. |

### 5.3 Recomendations for fire-fighters

| | | |
|---|---|---|
| Specific extinguishing methods | : | Standard procedure for chemical fires.<br>Clear fire area of all non-emergency personnel.<br>Keep adjacent containers cool by spraying with water. |
| 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).

## 6. ACCIDENTAL RELEASE MEASURES

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

Personal precautions :

Observe all relevant local and international regulations.
Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.
Local authorities should be advised if significant spillages cannot be contained.
Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.
Stay upwind and keep out of low areas.
Be ready for fire or possible exposure.

### 6.2 Environmental precautions

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

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

Methods and materials for containment and cleaning up : For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely
For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

### 6.4 Reference to other sections

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

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

| | | |
|---|---|---|
| General Precautions | : | Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.<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.<br>Ensure that all local regulations regarding handling and storage facilities are followed. |
| Advice on safe handling | : | Avoid contact with skin, eyes and clothing.<br>Do not empty into drains.<br>Sudden Release of Pressure Hazard |
| Avoidance of contact | : | Copper.<br>Copper alloys.<br>Strong oxidising agents.<br>Aluminum |
| Product Transfer | : | Keep containers closed when not in use. Do not use compressed air for filling discharge or handling. |

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

| | | |
|---|---|---|
| Conditions for safe storage | : | Refer to section 15 for any additional specific legislation covering the packaging and storage of this product. |
| Other data | : | Bulk storage tanks should be diked (bunded).<br>Vapours from tanks should not be released to atmosphere.<br>Breathing losses during storage should be controlled by a suitable vapour treatment system.<br>Nitrogen blanket recommended for large tanks (capacity 100 m3 or higher).<br>Insulation (lagging) will minimize heat loss in areas of low ambient temperature.<br>Tanks should be fitted with heating coils in areas where ambient conditions can result in handling temperatures below the freezing point/pour point of the product. |
| Packaging material | : | Suitable material: Stainless steel., Epoxy resins, Polyester.<br>Unsuitable material: Aluminum, Copper., Copper alloys. |
| Container Advice | : | Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers. |

### 7.3 Specific end use(s)

| | | |
|---|---|---|
| Specific use(s) | : | Use in detergent manufacture. |

| | | |
|---|---|---|
| Uses advised against | : | This product must not be used in applications other than the above without first seeking the advice of the supplier.<br>This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier. |

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Control parameters

**Biological occupational exposure limits**

No biological limit allocated.

### 8.2 Exposure controls

**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

| | | |
|---|---|---|
| **Engineering measures** | : | Use sealed systems as far as possible.<br>Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.<br>Local exhaust ventilation is recommended.<br>Firewater monitors and deluge systems are recommended.<br>Eye washes and showers for emergency use.<br>Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.<br>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.<br>Appropriate measures include:<br><br>General Information:<br>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.
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.

**Personal protective equipment**

**Protective measures**

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

Respiratory protection : 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 unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
If air-filtering respirators are suitable for conditions of use: Select a filter suitable for organic gases and vapours [Type A boiling point >65°C (149°F)].

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. Longer term protection: Butyl rubber. Nitrile rubber. Incidental contact/Splash protection: PVC or neoprene rubber gloves. 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. 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.

Eye protection : Wear goggles for use against liquids and gas.
Wear full face shield if splashes are likely to occur.

Skin and body protection : Wear antistatic and flame-retardant clothing, if a local risk assessment deems it so.
Skin protection is not required under normal conditions of use. For prolonged or repeated exposures use impervious clothing over parts of the body subject to exposure.
If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

Thermal hazards : Not applicable

Hygiene measures : Wash hands before eating, drinking, smoking and using the toilet.
Launder contaminated clothing before re-use.

**Environmental exposure controls**

General advice : Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.
Information on accidental release measures are to be found in section 6.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | Liquid at 20 °C. |
| Colour | : | colourless |
| Odour | : | mild |
| Odour Threshold | : | Data not available |
| pH | : | Data not available |
| pour point | : | -12 °C / 10 °F<br>Method: ASTM D97 |

| | | |
|---|---|---|
| Melting point/freezing point | | -12 °C / 10 °F |
| Boiling point/boiling range | : | 213 - 245 °C / 415 - 473 °F |
| Flash point | : | 108 °C / 226 °F<br>Method: ASTM D93 (PMCC) |
| Evaporation rate | : | Data not available |
| Flammability (solid, gas) | : | Not applicable |
| Upper explosion limit | : | Data not available |
| Lower explosion limit | : | Data not available |
| Vapour pressure | : | < 5 Pa (25 °C / 77 °F) |
| Relative vapour density | : | 5.7 |
| Relative density | : | 0.83 (20 °C / 68 °F)<br>Method: ASTM D4052 |
| Density | : | 831 kg/m3 (20 °C / 68 °F)<br>Method: ASTM D4052 |
| Solubility(ies) | | |
| Water solubility | : | Data not available |
| Partition coefficient: n-octanol/water | : | log Pow: 3.8 - 4.7 |
| Auto-ignition temperature | : | Data not available |
| Decomposition temperature | : | Data not available |
| Viscosity | | |
| Viscosity, dynamic | : | 14 mPa.s (20 °C / 68 °F)<br>Method: ASTM D445 |
| Viscosity, dynamic | | 50 mPa.s (Not applicable / )<br>Method: ASTM D445 |
| Viscosity, kinematic | : | 9 mm2/s (40 °C / 104 °F)<br>Method: ASTM D445 |
| | | 16 mm2/s (20 °C / 68 °F)<br>Method: ASTM D445 |
| Particle size | : | Data not available |

**9.2 Other information**

| | | |
|---|---|---|
| Explosive properties | : | Not classified |
| Oxidizing properties | : | Not applicable |
| Surface tension | : | Data not available |
| Conductivity | : | Electrical conductivity: > 10,000 pS/m<br>A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid, This material is not expected to be a static accumulator. |
| Molecular weight | : | 160 g/mol |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**

Stable at normal ambient temperature and pressure., May oxidise in the presence of air.

**10.2 Chemical stability**

The product is chemically stable. Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : None known.

**10.4 Conditions to avoid**

Conditions to avoid : Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**

Materials to avoid : Copper.
Copper alloys.
Strong oxidising agents.
Aluminum

**10.6 Hazardous decomposition products**

: None expected under normal use conditions.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

| | | |
|---|---|---|
| Basis for assessment | : | Information given is based on product testing, and/or similar products, and/or components.<br>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 | : | Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion. |

**Acute toxicity**

**Components:**

**Alcohols, C9-11:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Rat: > 5000 mg/kg<br>Remarks: Low toxicity |
| Acute inhalation toxicity | : | Remarks: Low toxicity by inhalation. |
| Acute dermal toxicity | : | Remarks: Low toxicity |

**Skin corrosion/irritation**

**Components:**

**Alcohols, C9-11:**
Remarks: Causes skin irritation.

**Serious eye damage/eye irritation**

**Components:**

**Alcohols, C9-11:**
Remarks: Slightly irritating to the eye.

**Respiratory or skin sensitisation**

**Components:**

**Alcohols, C9-11:**
Remarks: Not a sensitiser.
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**

**Components:**

**Alcohols, C9-11:**

Remarks: Non mutagenic

**Carcinogenicity**

**Components:**

**Alcohols, C9-11:**

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

| Material | GHS/CLP Carcinogenicity Classification |
|---|---|
| Alcohols, C9-11 | No carcinogenicity classification. |

**Reproductive toxicity**

**Components:**

**Alcohols, C9-11:**

Remarks: Not a developmental toxicant., Based on available data, the classification criteria are not met., Does not impair fertility.

**STOT - single exposure**

**Components:**

**Alcohols, C9-11:**
Remarks: Based on available data, the classification criteria are not met.

**STOT - repeated exposure**

**Components:**

**Alcohols, C9-11:**
Remarks: Based on available data, the classification criteria are not met.

**Aspiration toxicity**

**11.2 Information on other hazards**

**Components:**
**Alcohols, C9-11:**
Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

**Further information**

**Components:**
**Alcohols, C9-11:**
Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

## 12. ECOLOGICAL INFORMATION

| | | |
|---|---|---|
| Basis for assessment | : | Incomplete ecotoxicological data are available for this product. The information given below is based partly on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s). |

### 12.1 Toxicity

**Components:**
**Alcohols, C9-11 :**

| | | |
|---|---|---|
| Toxicity to fish (Acute toxicity) | : | Remarks: LC/EC/IC50 >1 - <=10 mg/l Toxic |
| Toxicity to crustacean (Acute toxicity) | : | Remarks: LC/EC/IC50 >1 - <=10 mg/l Toxic |
| Toxicity to algae/aquatic plants (Acute toxicity) | : | Remarks: LC/EC/IC50 >1 - <=10 mg/l Toxic |
| Toxicity to microorganisms (Acute toxicity) | : | EC50 : > 10,000 mg/l |
| Toxicity to fish (Chronic toxicity) | : | Remarks: Data not available |
| Toxicity to crustacean(Chronic toxicity) | : | Remarks: NOEC/NOEL > 0.01 - <=0.1 mg/l |

### 12.2 Persistence and degradability

**Components:**
**Alcohols, C9-11 :**

| | | |
|---|---|---|
| Biodegradability | : | Remarks: Readily biodegradable. |

### 12.3 Bioaccumulative potential

**Product:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: 3.8 - 4.7 |

**Components:**
**Alcohols, C9-11 :**

| | | |
|---|---|---|
| Bioaccumulation | : | Remarks: Bioaccumulation is unlikely to occur due to |

metabolism and excretion.

**12.4 Mobility in soil**

**Components:**
**Alcohols, C9-11 :**

| | | |
|---|---|---|
| Mobility | : | Remarks: Floats on water., Adsorbs to soil and has low mobility |

**12.5 Other adverse effects**

no data available

**Components:**
**Alcohols, C9-11 :**

| | | |
|---|---|---|
| Additional ecological information | : | None known. |

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

| | | |
|---|---|---|
| Waste from residues | : | 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.<br>Waste product should not be allowed to contaminate soil or water.<br><br>Disposal should be in accordance with applicable regional, national, and local laws and regulations.<br>Local regulations may be more stringent than regional or national requirements and must be complied with. |
| Contaminated packaging | : | Drain container thoroughly.<br>After draining, vent in a safe place away from sparks and fire.<br>Residues may cause an explosion hazard.<br>Do not puncture, cut, or weld uncleaned drums.<br>Send to drum recoverer or metal reclaimer. |

## 14. TRANSPORT INFORMATION

### 14.1 UN number or ID number

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

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

### 14.2 UN proper shipping name

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

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

### 14.3 Transport hazard class(es)

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

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

### 14.4 Packing group

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

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

### 14.5 Environmental hazards

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

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

### 14.6 Special precautions for user

Remarks : Special Precautions: Refer to Section 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 Maritime transport in bulk according to IMO instruments

Pollution category : X
Ship type : 2
Product name : NEODOL 91 (contains Undecyl alcohol)

**Additional Information** : This product may be transported under nitrogen blanketing. Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space entry.

Transport in bulk according to Annex II of Marpol and the IBC Code

## 15. REGULATORY INFORMATION

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

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

The Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (amended version issued 2000). The Factories Act, 1948, The Second Schedule: Permissible levels of certain chemical substances in work environment, as amended through 1987. India Central motor Vehicles (Amendment) Rules 1993.

**Other international regulations**

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

| | | |
|---|---|---|
| DSL | : | Listed |
| IECSC | : | Listed |
| ENCS | : | Listed |
| KECI | : | Listed |
| NZIoC | : | Listed |
| TSCA | : | Listed |
| TCSI | : | Listed |

## 16. OTHER INFORMATION

**Full text of H-Statements**

| | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Full text of other abbreviations**

| | |
|---|---|
| Aquatic Chronic | Long-term (chronic) aquatic hazard |
| Eye Irrit. | Eye irritation |
| 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.

**Further information**

Training advice : Provide adequate information, instruction and training for operators.

Other information : A vertical bar (|) in the left margin indicates an amendment from the previous version.

| | | |
|---|---|---|
| Sources of key data used to compile the Safety Data Sheet | : | The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID date base, EC 1272 regulation, etc). |

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.