According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **Heavy Propylene Glycols**

Version Revision Date: SDS Number: Print Date: 09/03/2022

2.2 06/28/2018 800001034065 Date of last issue: 06/20/2017

#### **SECTION 1. IDENTIFICATION**

Product name : Heavy Propylene Glycols

Product code : U1531

Synonyms : Propylene glycols

#### Manufacturer or supplier's details

Company : Shell Chemical LP

PO Box 576

**HOUSTON TX 77001** 

USA

SDS Request : 1-800-240-6737 Customer Service : 1-855-697-4355

**Emergency telephone number** 

Chemtrec Domestic (24 hr) : 1-800-424-9300 Chemtrec International (24 : 1-703-527-3887

hr)

## Recommended use of the chemical and restrictions on use

Recommended use : Use only as a chemical intermediate.

Restrictions on use : This product must not be used in applications other than the

above without first seeking the advice of the supplier.

## **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with 29 CFR 1910.1200

Based on available data this substance / mixture does not meet the classification criteria.

**GHS** label elements

Hazard pictograms : No symbol

Signal word : No signal word

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard under GHS criteria.

**HEALTH HAZARDS:** 

Not classified as a health hazard under GHS criteria.

**ENVIRONMENTAL HAZARDS:** 

Not classified as an environmental hazard under GHS criteria.

Precautionary statements : Prevention:

No precautionary phrases.

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Response:

No precautionary phrases.

Storage:

No precautionary phrases.

Disposal:

No precautionary phrases.

#### Other hazards which do not result in classification

Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

#### **Hazardous components**

| Chemical name       | Synonyms  | CAS-No.    | Concentration (% w/w) |
|---------------------|---|------------|-----------------------|
| Tripropylene glycol | 1,1'-<br>(propylenedi-<br>oxy)dipropan-<br>2-ol | 1638-16-0  | 60 - 90               |
| Dipropylene glycol  | oxydipropanol                                   | 25265-71-8 | 5 - 25                |
| Water               |   | 7732-18-5  | >= 0 - <= 1.5         |

## **SECTION 4. 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.

If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with wa-

ter 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.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities

are swallowed, however, get medical advice.

Most important symptoms

and effects, both acute and

delayed

Not expected to give rise to an acute hazard under normal

conditions of use.

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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.

Indication of any immediate medical attention and special

treatment needed

Treat symptomatically. Following cases of gross overexposure, investigation of liver, kidney and eye function may be advisable. Records of such incidents should be maintained

for future reference.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Alcohol-resistant foam, water spray or fog. Dry chemical pow-

der, carbon dioxide, sand or earth may be used for small fires

only.

Unsuitable extinguishing

media

Do not use water in a jet.

Specific hazards during fire-

fighting

Material will not burn unless preheated.

Carbon monoxide may be evolved if incomplete combustion

occurs.

Containers exposed to intense heat from fires should be

cooled with large quantities of water.

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Further information : Evacuate the area of all non-essential personnel.

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).

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

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 skin, eyes and clothing.

Environmental precautions : Prevent from spreading or entering into drains, ditches or riv-

ers by using sand, earth, or other appropriate barriers.

Use appropriate containment to avoid environmental contami-

nation.

Ventilate contaminated area thoroughly.

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Methods and materials for containment and cleaning up

Contain run-off from residue flush and dispose of properly.
 Soak up residue with an absorbent such as clay, sand or other suitable material.

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.

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

Additional advice : 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**

Technical measures : 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

Chapter 8 of this Safety Data Sheet.

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.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

Advice on safe handling : Use local exhaust extraction over processing area.

Handle and open container with care in a well-ventilated area.

Do not empty into drains.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Handling Temperature:

Ambient.

Avoidance of contact : Strong oxidising agents.

Strong acids.
Strong bases.

Product Transfer : Keep containers closed when not in use. Do not pressurize

drum containers to empty.

Conditions for safe storage : Refer to section 15 for any additional specific legislation cov-

ering the packaging and storage of this product.

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Further information on stor-

age stability

Tanks must be clean, dry and rust-free.

Keep container tightly closed.

Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of

strict procedures and precautions.

Drums should be stacked to a maximum of 3 high.

Storage Temperature:

Ambient.

Packaging material : Suitable material: Stainless steel., Mild steel., Carbon steel

Unsuitable material: Data not available

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.

Specific use(s) : Not applicable

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

#### **SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

#### Components with workplace control parameters

Contains no substances with occupational exposure 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

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## **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. Eye washes and showers for emergency use.

#### General Information:

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

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 the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Hand protection

Remarks : Where hand contact with the product may occur the use of

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gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber gloves. 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 : If material is handled such that it could be splashed into eyes,

protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard

work clothes.

It is good practice to wear chemical resistant gloves.

Protective measures : Personal protective equipment (PPE) should meet recom-

mended national standards. Check with PPE suppliers.

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 envi-

ronmental legislation.

Information on accidental release measures are to be found in

section 6.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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Appearance : Liquid.

Colour : colourless

Odour : odourless

Odour Threshold : Data not available

pH : Typical 7

Melting / freezing point : Data not available

Boiling point/boiling range : > 255 °C / 491 °F

Flash point :  $145 \, ^{\circ}\text{C} \, / \, 293 \, ^{\circ}\text{F}$ 

Method: ASTM D93 (PMCC)

Evaporation rate : Data not available

Flammability (solid, gas) : Not applicable

Upper explosion limit / upper

flammability limit

12.6 %(V)

Lower explosion limit / Lower :

flammability limit

Data not available

Vapour pressure : <1 Pa (20 °C / 68 °F)

Relative vapour density : Data not available

Relative density :  $1.0204 (20 \, ^{\circ}\text{C} / 68 \, ^{\circ}\text{F})$ 

Density : 1,020 - 1,025 kg/m3 (20 °C / 68 °F)

Solubility(ies)

Water solubility : Completely miscible.

Partition coefficient: n-

octanol/water

: Data not available

Auto-ignition temperature : 310 °C / 590 °F

Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : Data not available

Viscosity, kinematic : Data not available

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Explosive properties : Not applicable

Oxidizing properties : Data not available

Surface tension : 71.4 mN/m, 22 °C / 72 °F

Conductivity: > 10,000 pS/m

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 : Data not available

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : The product does not pose any further reactivity hazards in

addition to those listed in the following sub-paragraph.

Chemical stability : No hazardous reaction is expected when handled and stored

according to provisions
Oxidises on contact with air.

Possibility of hazardous reac-

tions

None known.

Conditions to avoid : Extremes of temperature and direct sunlight.

Product cannot ignite due to static electricity.

Incompatible materials : Strong oxidising agents.

Strong acids. Strong bases.

Hazardous decomposition

products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and

unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degra-

dation.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Basis for assessment : Information given is based on product testing, and/or similar

products, and/or components.

## 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**

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**Product:** 

Acute oral toxicity : LD50 : > 5000 mg/kg

Remarks: Low toxicity:

Acute inhalation toxicity : Remarks: Low toxicity by inhalation.

Acute dermal toxicity : LD50 : > 5000 mg/kg

Remarks: Low toxicity:

#### Skin corrosion/irritation

**Product:** 

Remarks: Not irritating to skin.

## Serious eye damage/eye irritation

**Product:** 

Remarks: Not irritating to eye.

## Respiratory or skin sensitisation

**Product:** 

Remarks: Not a sensitiser.

Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity

**Product:** 

: Remarks: Not mutagenic.

## Carcinogenicity

**Product:** 

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

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

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## Reproductive toxicity

**Product:** 

.

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

fertility.

## STOT - single exposure

**Product:** 

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

## STOT - repeated exposure

**Product:** 

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

## **Aspiration toxicity**

**Product:** 

Not an aspiration hazard.

## **Further information**

**Product:** 

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

#### **SECTION 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.

**Ecotoxicity** 

Product:

Toxicity to fish (Acute toxici-

ty)

Remarks: LL/EL/IL50 > 100 mg/l

Practically non toxic:

Based on available data, the classification criteria are not met.

Toxicity to daphnia and other :

aquatic invertebrates (Acute

toxicity)

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to algae (Acute tox-

icity)

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

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Toxicity to fish (Chronic tox-

icity)

Remarks: NOEC/NOEL > 1.0 - <=10 mg/l (based on test data)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: NOEC/NOEL > 1.0 - <=10 mg/l (based on test data)

Toxicity to microorganisms

(Acute toxicity)

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

## Persistence and degradability

**Product:** 

Biodegradability : Remarks: Readily biodegradable.

**Bioaccumulative potential** 

**Product:** 

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

Mobility in soil

**Product:** 

Mobility : Remarks: Dissolves in water.

If product enters soil, it will be highly mobile and may contam-

inate groundwater.

Other adverse effects

no data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods

Waste from residues : Recover or recycle if possible.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Remove all packaging for recovery or waste disposal.

Do not dispose into the environment, in drains or in water

courses

Waste product should not be allowed to contaminate soil or

water.

Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

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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.

#### **SECTION 14. TRANSPORT INFORMATION**

## **National Regulations**

#### **US Department of Transportation Classification (49 CFR Parts 171-180)**

Not regulated as a dangerous good

## **International Regulations**

#### IATA-DGR

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : Z Ship type : 3

Product name : Propylene glycol

## 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.

**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.

#### **SECTION 15. REGULATORY INFORMATION**

## **EPCRA - Emergency Planning and Community Right-to-Know Act**

\*: This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

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SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## **Clean Water Act**

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

#### **US State Regulations**

## Pennsylvania Right To Know

Dipropylene glycol 25265-71-8

## California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Other regulations:

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

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

AIIC : Listed

DSL : Listed

IECSC : Listed

KECI : Listed

NZIoC : Listed

PICCS : Listed

TCSI : Listed

TSCA : Listed

ENCS : Listed

## **SECTION 16. OTHER INFORMATION**

#### **Further information**

NFPA Rating (Health, Fire, Reac- 0, 1, 0

tivity)

## Full text of other abbreviations

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this docu-

ment can be looked up in reference literature (e.g. scientific

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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 Ob-

served 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

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REACH = Registration Evaluation And Authorisation Of

Chomicals

Chemicals

RID = Regulations Relating to International Carriage of Dan-

gerous 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

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).

Revision Date : 06/28/2018

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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