

1 Identification of the substance/mixture and of the company/undertaking

Material Name: Roto Fluid ZProduct Use: Compressor oilProduct Code: 0017 5300 11

Manufacturer/Suppliers

Atlas Copco Airpower nv, Boomsesteenweg 957, 2610 Wilrijk, Belgium

Telephone : Please contact Atlas Copco UK +44 845 601 0001 or the Atlas Copco

Airpower office in Belgium: +32 3 870 2111 (8am-5pm CET)

Email Contact for Safety Data Sheet

If you have any enquiries about the content of this Safety Data Sheet

please email info.lubricants.cts@group.atlascopco.com

Emergency Telephone Number

Only for medical related issues, please contact medical service of Atlas

Copco Airpower in Belgium: +32 3 870 2105 (8am-5pm CET)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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: Not classified as a physical hazard according to

CLP criteria. HEALTH HAZARDS: Not classified as a health hazard under CLP criteria. ENVIRONMENTAL HAZARDS: Not classified as

environmental hazard according to CLP criteria.

Precautionary statements:

Prevention:No precautionary phrases.Response:No precautionary phrases.Storage:No precautionary phrases.Disposal:No precautionary phrases.

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.

3 Composition/information on ingredients

3.2 Mixtures



Chemical nature : Highly refined mineral oils and additives.

The highly refined mineral oil contains <3% (w/w) DMSO-extract,

according to IP346.

* 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.EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *		Asp. Tox.1; H304	0 - 90

For explanation of abbreviations see section 16.

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:

Treat symptomatically.

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.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

6.1.1 For non emergency personnel: Avoid contact with skin and eyes. 6.1.2 For emergency responders: Avoid contact with skin and eyes.

6.2 Environmental precautions

Environmental precautions

Use appropriate containment to avoid environmental 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.



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)

Specific use(s) : Not applicable

8 Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

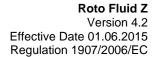
Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Oil mist, mineral		TWA	5 mg/m ³	US. ACGIH Threshold Limit Values

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. 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 vapours [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.



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 : -30 °CMethod: ASTM D97.

Initial boiling point and boiling range

> 280 °Cestimated value(s)

Flash point : 247 °C

Method: ASTM D92
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)

estimated value(s)

Relative vapour density

> 1estimated value(s)

Relative density : 0.860 (15 °C)
Density : 860 kg/m3 (15.0 °C)
Method: ASTM D4052

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 : 68 mm2/s (40.0 °C)
Method: ASTM D445

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

10 Stability and reactivity

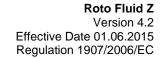
10.1 Reactivity : The product does not pose any further reactivity hazards in addition to

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.

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

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

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.

Remarks : Product contains mineral oils of types shown to be non-carcinogenic in

animal skin-painting studies., Highly refined mineral oils are not

classified as carcinogenic by the International Agency for Research on

Cancer (IARC).



Material	GHS/CLP Carcinogenicity Classification
Highly refined mineral oil	No carcinogenicity classification.

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.

12 Ecological information

12.1 Toxicity

Basis for assessment : Ecotoxicological data have not been determined specifically for this

product.

Information given is based 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).(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 practically non toxic:

LL/EL/IL50 > 100 mg/l



Toxicity to crustacean (Acute toxicity)

: Remarks: Expected to be practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity)

: Remarks: Expected to be practically non toxic:

LL/EL/IL50 > 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.

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.

Poorly soluble mixture., May cause physical fouling of aquatic

organisms.

Mineral oil is not expected to cause any chronic effects to aquatic

organisms at concentrations less than 1 mg/l.

13 Disposal considerations

13.1 Waste treatment methods

Product : Waste product should not be allowed to contaminate soil or ground

water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.



Disposal should be in accordance with applicable regional, national,

and local laws and regulations.

Local regulations may be more stringent than regional or national

requirements and must be complied with.

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 05*

Remarks : Classification of waste is always the responsibility of the end user.

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.

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.

16 Other information

16.1 Full text of H-Statements

H304 : May be fatal if swallowed and enters airways.

16.2 Full text of other abbreviations

Asp. Tox. : Aspiration hazard

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 für 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



16.3 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.

16.4 Utgave : 4.2

16.5 Effective Date : 01.06.2015