

 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name MARLOX K 158

Substance name (REACH / CLP): Decan-1-ol, propoxylated, ethoxylated (>2.5 moles EO/PO) (CAS: 9038-29-3)

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

Use of the Substance/Mixture Industrial use, raw material for washing and cleaning agents, raw material for

textile auxiliary agents, surface-active substance, Defoamer

Uses advised against

1.3 Details of the supplier of the safety data sheet

Company SASOL Germany GmbH

Anckelmannsplatz 1 20537 Hamburg Germany

Telephone: +49 40 63684-1000 Telefax: +49 40 63684-3700

Information (Product safety) E-mail: msds-info.germany@de.sasol.com

1.4 Emergency telephone number

Emergency telephone number +44 1235 239670 Europe

+44 1235 239671 Middle East, Africa

+1 215 207 0061 North America, South America

+65 3158 1074 Asia Pacific Region +44 1865 407333 Global (english)

### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation Category 2 Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

Signal word Warning

**Hazard statements** 

H319 Causes serious eye irritation.

**Precautionary statements** 

P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

### Hazardous components which must be listed on the label:

• Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

### 3.1 Substances

This product is a substance in the meaning of regulation (EC) 1907/2006.

# COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)

content: >= 90 - <= 100 % component type: Active ingredient

**EC-No.**: 932-107-1 **Index-No.**: **CAS-No.**: 9038-29-3 **REACH No.**: Not relevant (polymer)

Substance name (REACH / CLP): Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)

Classification (Regulation Eye Irrit. 2 H319

(EC) No 1272/2008)

For information on ingredients listed on the candidate list (Candidate List of Substances of Very High Concern for Authorisation) or in the list of substances subject to authorization (Annex XIV of Regulation (EC) No 1907/2006), see section 15.1. of this data sheet.



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of first aid measures

General advice If you feel unwell, seek medical advice (show the label where possible). Take off all

contaminated clothing immediately.

If inhaled Remove from exposure, lie down. If breathing is irregular or stopped, administer

artificial respiration. Monitor breathing, give oxygen if necessary. Consult a

physician.

In case of skin contact Wash off immediately with plenty of water. Consult a physician if necessary.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.

If swallowed Consult a physician. Do not induce vomiting without medical advice. Never give

anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Risks Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

## **SECTION 5: FIREFIGHTING MEASURES**

5.1 Extinguishing media

Suitable extinguishing media Water spray, Dry powder, Foam, Carbon dioxide (CO2)

Unsuitable extinguishing media High volume water jet

 ${\bf 5.2}$  Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Dangerous gases or fumes may occur in case of fire.

5.3 Advice for firefighters

Special protective equipment

for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information** Standard procedure for chemical fires.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment.



Version: 7.00 Date of first issue: 2001/06/27 Revision Date: 2023/06/16 Date of last issue: 2017/05/05

6.2 Environmental precautions

**Environmental precautions** Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder, sawdust). The material taken up must be disposed of in accordance with

regulations.

6.4 Reference to other sections

For personal protection see section 8.

#### **SECTION 7: HANDLING AND STORAGE**

7.1 Precautions for safe handling

Advice on safe handling Wear personal protective equipment.

Avoid contact with skin and eyes.

Advice on protection against

fire and explosion Fire-fighting class Normal measures for preventive fire protection.

Do not spray on a naked flame or any incandescent material.

B: Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

and containers

Keep tightly closed in a dry and cool place.

Other data Stable at normal ambient temperature and pressure.

7.3 Specific end use(s)

Specific use(s) This information is not available.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control parameters

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

National occupational exposure limits

Contains no substances with occupational exposure limit values.

No data available

### **EUROPEAN OCCUPATIONAL EXPOSURE LIMITS**

No data available

#### **DERIVED NO EFFECT LEVEL (DNEL)**

Substance name: Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

No data available

### PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)

No data available

#### 8.2 Exposure controls

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection No personal respiratory protective equipment normally required. In inadequately

ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or

ABEK-P2), in compliance with EN 141.

Hand protection Material: butyl-rubber

Break through time: >= 480 min Glove thickness: >= 0.7 mm

Material: Nitrile rubber Break through time: >= 30 min Glove thickness: >= 0.4 mm

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

Eye protectionSafety glasses with side-shieldsSkin and body protectionWear suitable protective equipment.

Hygiene measures Avoid contact with the skin and the eyes. Handle in accordance with good

industrial hygiene and safety practice. Keep away from food, drink and animal

feedingstuffs. When using do not eat, drink or smoke.

Protective measures Avoid contact with the skin and the eyes. Wear suitable gloves and eye/face

protection.

### **ENVIRONMENTAL EXPOSURE CONTROLS**

General advice Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.



Version: 7.00 Date of first issue: 2001/06/27

Revision Date: 2023/06/16 Date of last issue: 2017/05/05

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

9.1 Information on basic physical and chemical properties

Physical state Physical state: liquid; 20 °C; 1,013 hPa

Shape: liquid

Colour colourless
Odour mild

Odour Threshold No data available

Melting point/range ca. -25 °C; DIN ISO 3841

Boiling point/boiling range No data available
Flammability not applicable (liquid)

Upper explosion limit

Lower explosion limit

No data available

No data available

Ca. 172 °C; DIN 51376

Auto-ignition temperature

Ca. 365 °C; DIN 51794

Decomposition temperature

No data available

**pH** 5 - 7; 20 g/l; DIN EN 1262

Viscosity

Viscosity, kinematic No data available

Solubility(ies)

Water solubility 20 °C; completely miscible

Partition coefficient: n-

octanol/water

Not applicable

Vapour pressure < 0.1 hPa; 20 °C

Relative density No data available

**Density** ca.0.98 g/cm3; 20 °C; DIN 51757

Relative vapour density No data available

9.2 Other information

**Explosives** not expected based on structure and functional groups

Oxidizing properties Not applicable

Self-ignition not auto-flammable

Evaporation rate No data available



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

## **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity

**Note** Stable at normal ambient temperature and pressure.

10.2 Chemical stability

**Note** No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions None known.

10.4 Conditions to avoid

**Conditions to avoid** Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation.

10.5 Incompatible materials to avoid

Materials to avoid Strong acids and oxidizing agents;

10.6 Hazardous decomposition products

**Hazardous decomposition** No decomposition if stored and applied as directed.

**products** Hazardous decomposition products formed under fire conditions.

Thermal decomposition No data available

## **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

### **Acute toxicity**

Not classified based on available information.

Acute oral toxicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

LD50 Rat: > 2,000 - 5,000 mg/kg; OECD Test Guideline 401

Category approach

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

Acute inhalation toxicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

Acute dermal toxicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

### Skin corrosion/irritation

Not classified based on available information.

**Skin irritation** Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

Rabbit: slightly irritating; OECD Test Guideline 404

Category approach

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

### Serious eye damage/eye irritation

Causes serious eye irritation.



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

Eye irritation Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

Rabbit: irritating; OECD Test Guideline 405

Category approach

Causes serious eye irritation.

#### Skin sensitisation / Respiratory sensitisation

Skin contact: Not classified based on available information. Inhalation: Not classified based on available information.

**Sensitisation** Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

not expected based on structure and functional groups

#### Germ cell mutagenicity

Not classified based on available information.

**Genotoxicity in vitro** Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

Ames test; Salmonella typhimurium; with and without metabolic activation: Non

mutagenic; OECD Test Guideline 471

Category approach

**Genotoxicity in vivo** Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

#### Carcinogenicity

Not classified based on available information.

Carcinogenicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

This information is not available.

### Reproductive toxicity

Not classified based on available information.

Effects on fertility Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

This information is not available.

Effects on foetal Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

**development** This information is not available.

### STOT - single exposure

Not classified based on available information.

Assessment Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

The substance or mixture is not classified as specific target organ toxicant, single

exposure.

### STOT - repeated exposure

Not classified based on available information.

Assessment Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

The substance or mixture is not classified as specific target organ toxicant,

repeated exposure.

Repeated dose toxicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

This information is not available.

## Aspiration hazard

Not classified based on available information.

Aspiration toxicity Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):



Version: 7.00 Date of first issue: 2001/06/27 Revision Date: 2023/06/16 Date of last issue: 2017/05/05

Not applicable

11.2 Information on other hazards

**Endocrine disrupting** 

properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO): Toxicity to fish

LC50 (96 h) Cyprinus carpio (Carp): > 1 - 10 mg/l; semi-static test; OECD Test

Guideline 203 Category approach

Toxicity to fish - Chronic

toxicity

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

Toxicity to daphnia and other

aquatic invertebrates

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO): EC50 (48 h) Daphnia magna (Water flea): > 10 - 100 mg/l; static test; OECD Test

Guideline 202 Category approach

Toxicity to daphnia and other aquatic invertebrates - Chronic

toxicity

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

Toxicity to aquatic plants Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

EC50 (72 h) Desmodesmus subspicatus (green algae): > 1 - 10 mg/l; Growth rate;

static test; OECD Test Guideline 201; Category approach

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

EC10 (72 h) Desmodesmus subspicatus (green algae): > 1 - 10 mg/l; Growth rate;

static test; OECD Test Guideline 201; Category approach

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO): Toxicity to bacteria

EC50 (3 h) activated sludge: 380 mg/l; Respiration inhibition; OECD Test Guideline

209

Category approach

12.2 Persistence and degradability

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO): Biodegradability

Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301B

Category approach

12.3 Bioaccumulative potential

**Bioaccumulation** Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

12.4 Mobility in soil

Distribution among environmental compartments Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

No data available

12.5 Results of PBT and vPvB assessment



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

Results of PBT assessment This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative

(vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative

(vPvB) at levels of 0.1% or higher.

Results of PBT assessment Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

This substance is not considered to be persistent, bioaccumulating and toxic

(PBT).

This substance is not considered to be very persistent and very bioaccumulating

(vPvB).

12.6 Endocrine disrupting properties

endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

information

Additional ecological

Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO):

None known.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1 Waste treatment methods

**Product** Dispose of contents/container in accordance with local regulation.

### **SECTION 14: TRANSPORT INFORMATION**

#### 14.1 UN number or ID number

ADR Not dangerous goods
RID Not dangerous goods
ADN Not dangerous goods
IMDG Not dangerous goods
ICAO/IATA Not dangerous goods

## 14.2 UN proper shipping name

ADR Not dangerous goods
RID Not dangerous goods
ADN Not dangerous goods
IMDG Not dangerous goods
ICAO/IATA Not dangerous goods

## 14.3 Transport hazard class(es)

ADR Not dangerous goods
RID Not dangerous goods



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

ADN Not dangerous goods
IMDG Not dangerous goods
ICAO/IATA Not dangerous goods

## 14.4 Packing group

ADR Not dangerous goods
RID Not dangerous goods
ADN Not dangerous goods
IMDG Not dangerous goods
ICAO/IATA Not dangerous goods

#### 14.5 Environmental hazards

ADR Environmentally hazardous no RID Environmentally hazardous no ADN Environmentally hazardous no IMDG Marine pollutant no ICAO/IATA Environmentally hazardous no

#### 14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

**Remarks** No information available.

## **SECTION 15: REGULATORY INFORMATION**

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

EU PIC: Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Not applicable

EU SVHC: REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Not applicable

EU. REACH-Annex XIV: REACH - List of substances subject to authorisation (Annex XIV)

Not applicable

EC 1005/2009: Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Not applicable

EU POP: Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

Not applicable



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

UK. REACH Annex XIV: UK REACH List of substances subject to authorisation (Annex XIV)

Not applicable

UK SVHC: UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation

Not applicable

GB POPs: The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)

Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Number on list: 3

See Annex XVII to Regulation (EC) no 1907/2006 and amendments for Conditions of restriction

Legislation on the control of major-accident hazards involving dangerous substances

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

list entry in the directive:: Not applicable

## Other regulations

This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.



 Version: 7.00
 Date of first issue: 2001/06/27

 Revision Date: 2023/06/16
 Date of last issue: 2017/05/05

#### **Notification status**

Australian Inventory of Industrial Chemicals	ZAU_AIIC	not listed (product or constituents are not listed)
Canadian Domestic Substances List (DSL)	DSL	restricted (product or constituents are listed with quantity restrictions)
Switzerland. Consolidated Inventory (based on EU-EINECS and EU-NLP)	CH INV	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC	listed (product or constituents are listed)
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	listed (product or constituents are listed)
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	listed (product or constituents are listed)
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	not listed (product or constituents are not listed)
Taiwan Chemical Substance Inventory (TCSI)	ZTW_INV	listed (product or constituents are listed)
United States TSCA Inventory	TSCA	listed (product or constituents are listed)

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

### 15.2 Chemical safety assessment

## Decan-1-ol, ethoxylated, propoxylated (>= 2.5 moles EO/PO)

A Chemical Safety Assessment is not required for this substance (exempted from obligation to register).

## **SECTION 16: OTHER INFORMATION**

## Full text of H-Statements referred to under sections 2 and 3.

H319 Causes serious eye irritation.

### Safety datasheet sections which have been updated:

- 1. Identification of the substance/mixture and of the company/undertaking
- 2. Hazards identification
- 3. Composition/information on ingredients
- 4. First aid measures
- 6. Accidental release measures
- 8. Exposure controls/personal protection
- 9. Physical and chemical properties



Version: 7.00 Date of first issue: 2001/06/27

Revision Date: 2023/06/16 Date of last issue: 2017/05/05

11. Toxicological information12. Ecological information15. Regulatory information

Further information: 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.

This safety datasheet only contains information relating to safety and does not

replace any product information or product specification.

## Key or legend to abbreviations and acronyms used in the safety data sheet

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route

AICS Australian Inventory of Chemical Substances
ANSI American National Standards Institute
ASTM American Society of Testing and Materials (US)

BCF Bioconcentration factor

CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DIN Deutsches Institut für Normung
DNEL Derived No-Effect Level
DSL Domestic Substances List
EC... Effect concentration ... %

ENCS Existing Notified Chemical Substances (Japan)

EWC European Waste Catalogue

IATA International Air Transport Association

IBC Intermediate Bulk Container

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

 IMDG
 International Maritime Dangerous Goods

 IMO
 International Maritime Organization

 ISHL
 Industrial Safety and Health Law (Japan)

 ISO
 International Organization for Standardization

 IUAPC
 International Union of Pure and Applied Chemistry

KECI Korea Existing Chemicals Inventory
LC... Lethal Concentration, ...%
LD... Lethal Dose, ...%

MARPOL International Convention for the Prevention of Pollution From Ships

NDSL Non-Domestic Substances List
NOAEL no observable adverse effect level
NOEL/NOEC No Observed-effect level/concentration
NZIOC New Zealand Inventory of Chemicals
OECD Organisation for Economic Co-operation

OECD Organisation for Economic Co-operation and Development
PBT persistent, bioaccumulative, toxic
PICCS Philippine Inventory of Chemicals and Chemical Substances

PNEC Predicted No-Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport international ferroviaire de marchandises dangereuses

TG Test Guideline

TRGS Technische Regeln für Gefahrstoffe
TSCA Toxic Substances Control Act
vPvB very persistent, very bioaccumulative

WGK Wassergefährdungsklasse