

MARLIPAL O 13/120

Version: 5.09

Revision Date 2018/09/07

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Trade name	MARLIPAL O 13/120
INCI	Trideceth-12
Substance name (REACH / CLP)	Isotridecanol,ethoxylated (>=2.5 EO)(CAS#: 69011-36-5)

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

Use	Industrial use raw material for cosmetic agents raw material for washing and cleaning agents raw material for textile auxiliary agents surface-active substance
Uses advised against	

1.3 Details of the supplier of the safety data sheet

Company	SASOL Germany GmbH Anckelmannsplatz 1 20537 Hamburg
	Telephone: +49 40 63684-1000 Telefax: +49 40 63684-3700
Information (Product safety):	Telephone: + 49 (0) 23 65 - 49 47 05 Telefax: + 49 (0) 23 65 - 49 92 40
E-mail address	msds-info.germany@de.sasol.com

1.4 Emergency telephone number

Emergency telephone number	+ 49 (0) 23 65 - 49 22 32
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SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Acute toxicity Category 4 (Oral)	Harmful if swallowed.
Serious eye damage Category 1	Causes serious eye damage.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)****Hazard pictograms**

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Signal word	Danger
Hazard statements	
H302	Harmful if swallowed.
H318	Causes serious eye damage.
Precautionary statements	
P264	Wash face, hands and any exposed skin thoroughly after handling.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P330	Rinse mouth.

2.3 Other hazards

Danger of slipping after spill or leakage.
Forms slippery/greasy layers with water.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

isotridecanol, ethoxylated (>= 2.5 EO)

content: >= 90 - <= 100 %

component type: Active ingredient

EC-No.: 931-138-8

Index-No.:

CAS-No.: 69011-36-5

REACH No.: Not relevant (polymer)

Classification (Regulation (EC) No 1272/2008):

Acute Tox. 4 (Oral)
Eye Dam. 1

H302
H318

Specific Concentration Limits (see section 11)

> 10 % Eye Dam. Category 1; H318
> 1 - 10 % Eye Irrit. Category 2; H319

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

Other data Synonyms: isotridecanol, ethoxylated; CAS-No.: 9043-30-5

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).

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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	Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	Symptoms: No information available. Risks: No information available.
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4.3 Indication of any immediate medical attention and special treatment needed

Indication of any immediate medical attention and special treatment needed	Treatment: No information available.
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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Water spray, Dry powder, Foam, Carbon dioxide (CO ₂)
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5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Dangerous gases or fumes may occur in case of fire.
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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.
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6.2 Environmental precautions

Environmental precautions	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.
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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	Use mechanical handling equipment. The material taken up must be disposed of in accordance with regulations.
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6.4 Reference to other sections

For personal protection see section 8.

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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	Provide sufficient air exchange and/or exhaust in work rooms. Keep away from heat and sources of ignition.
Fire-fighting class	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.
Storage class (TRGS 510)	11: Combustible Solids
Other data	Stable at normal ambient temperature and pressure.

7.3 Specific end use(s)

Specific use(s)	This information is not available.
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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS****National occupational exposure limits**

No data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

Derived No Effect Level (DNEL)

No data available

Predicted No Effect Concentration (PNEC)

No data available

8.2 Exposure controls**ENGINEERING MEASURES**

If possible, use material transfer/filling, metering and blending plants that are closed.

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
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Hand protection	<p>breathing apparatus or breathing apparatus with a combined filter (e.g. A-P2 or ABEK-P2), in compliance with EN 141.</p> <p>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).</p> <p>gloves suitable for permanent contact: Material: butyl-rubber Break through time: >= 480 min Layer thickness: >= 0.7 mm</p> <p>gloves suitable for splash protection: Material: Nitrile rubber/nitrile latex Break through time: >= 30 min Layer thickness: >= 0.4 mm</p>
Eye protection	Tightly fitting safety goggles, Safety glasses with side-shields
Skin and body protection	Protective suit
Hygiene measures	Avoid contact with eyes. General industrial hygiene practice. 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 eyes. Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice	Avoid subsoil penetration.
Water	Do not flush into surface water or sanitary sewer system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	solid; 20 °C; 1,013 hPa
Form	liquid, pasty
Colour	cloudy
Odour	mild
Odour Threshold	No valid method available
pH	5 - 7; 20 g/l; 20 °C
Melting point/range	ca. 20 °C
Flash point	> 180 °C; DIN 51376
Evaporation rate	Not relevant / not applicable Justification: Solid

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Flammability (solid, gas)	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	< 0.1 hPa; 20 °C
Relative vapour density	No data available
Density	ca.1.00 g/cm ³ ; 50 °C
Relative density	No data available
Water solubility	20 °C; completely miscible
Partition coefficient: n-octanol/water	No data available
Ignition temperature	ca. 360 °C; DIN 51794
Auto-ignition temperature	Not applicable solid with a melting point < 160°C
Viscosity, dynamic	ca. 40 mPas; 50 °C
Explosive properties	not expected based on structure and functional groups
Oxidizing properties	No data available

9.2 Other data

None known.

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 products No decomposition if stored normally.

Thermal decomposition Hazardous decomposition products formed under fire conditions.

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SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Acute oral toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): LD50 Rat: > 300 - 2,000 mg/kg Category approach own test results/literature values Harmful if swallowed.
Acute inhalation toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): No data available
Acute dermal toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): LD50 Rabbit: > 2,000 mg/kg; Category approach (literature value) Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation	isotridecanol, ethoxylated (≥ 2.5 EO): Rabbit: not irritating own test results/literature values Category approach Based on available data, the classification criteria are not met.
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Serious eye damage/eye irritation

Eye irritation	isotridecanol, ethoxylated (≥ 2.5 EO): Rabbit: Irreversible effects on the eye Category approach own test results/literature values Causes serious eye damage. isotridecanol, ethoxylated (≥ 2.5 EO): Category approach Test substance: 10% dilution Causes serious eye irritation.
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Respiratory or skin sensitisation

Sensitisation	isotridecanol, ethoxylated (≥ 2.5 EO): Maximisation Test Guinea pig: not sensitizing Category approach (literature value) Based on available data, the classification criteria are not met.
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Germ cell mutagenicity

Genotoxicity in vitro	isotridecanol, ethoxylated (≥ 2.5 EO): In vitro tests did not show mutagenic effects Category approach own test results/literature values
Genotoxicity in vivo	isotridecanol, ethoxylated (≥ 2.5 EO): In vivo tests did not show mutagenic effects Category approach (literature value)
Remarks	isotridecanol, ethoxylated (≥ 2.5 EO): Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity	isotridecanol, ethoxylated (≥ 2.5 EO): The substance has been shown to be not genotoxic, therefore it is not expected to
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	have a carcinogenic potential. Category approach (literature value)
Remarks	isotridecanol, ethoxylated (≥ 2.5 EO): Based on available data, the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): Animal testing did not show any effects on fertility. Category approach (literature value)
RemarksReproductive toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): Based on available data, the classification criteria are not met.
Teratogenicity	isotridecanol, ethoxylated (≥ 2.5 EO): Did not show teratogenic effects in animal experiments. Category approach (literature value)
Remarks-Teratogenicity	isotridecanol, ethoxylated (≥ 2.5 EO): Based on available data, the classification criteria are not met.
STOT - single exposure	
Remarks	isotridecanol, ethoxylated (≥ 2.5 EO): The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	
Remarks	isotridecanol, ethoxylated (≥ 2.5 EO): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): Rat; Oral; 2 years NOAEL: 50 mg/kg (based on body weight and day) Target Organs: Heart, Liver, Kidney Symptoms: reduced body weight gain, increased relative organ weights Category approach (literature value)
Aspiration hazard	
Aspiration toxicity	isotridecanol, ethoxylated (≥ 2.5 EO): Not applicable
Toxicological information	isotridecanol, ethoxylated (≥ 2.5 EO): Toxicokinetics Category approach The substance is expected to be rapidly absorbed and excreted. (literature value)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	isotridecanol, ethoxylated (≥ 2.5 EO): LC50 (96 h) Cyprinus carpio (Carp): $> 10 - 100$ mg/l ; flow-through test; OECD Test Guideline 203
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	Category approach own test results/literature values
Toxicity to daphnia and other aquatic invertebrates	isotrilinecanol, ethoxylated (≥ 2.5 EO): EC50 (48 h) Daphnia magna (Water flea): > 10 - 100 mg/l ; static test; OECD Test Guideline 202 Category approach own test results/literature values
Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity	isotrilinecanol, ethoxylated (≥ 2.5 EO): EC10 (21 d) Daphnia magna (Water flea): 2.6 mg/l; reproduction rate; semi-static test; OECD Test Guideline 211
Toxicity to aquatic plants	isotrilinecanol, ethoxylated (≥ 2.5 EO): EC50 (72 h) Desmodismus subspicatus (green algae): > 10 - 100 mg/l ; static test; OECD Test Guideline 201; Category approach own test results/literature values isotrilinecanol, ethoxylated (≥ 2.5 EO): EC10 (72 h) Desmodismus subspicatus (green algae): > 1 - 10 mg/l ; static test; OECD Test Guideline 201; Category approach own test results/literature values
Toxicity to bacteria	isotrilinecanol, ethoxylated (≥ 2.5 EO): EC50 activated sludge: 140 mg/l; Respiration inhibition Category approach (literature value)
Toxicity to soil dwelling organisms	isotrilinecanol, ethoxylated (≥ 2.5 EO): NOEC Eisenia foetida: 220 mg/kg; reproduction rate; artificial soil Category approach (literature value)
Toxicity to terrestrial flora	isotrilinecanol, ethoxylated (≥ 2.5 EO): emergence, growth; NOEC: 10 mg/kg; Lepidium sativum (cress); OECD Test Guideline 208 Category approach own test results/literature values
Toxicity for other terrestrial non-mammalian fauna	isotrilinecanol, ethoxylated (≥ 2.5 EO): No data available
12.2 Persistence and degradability	
Biodegradability	isotrilinecanol, ethoxylated (≥ 2.5 EO): Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301B Category approach own test results/literature values isotrilinecanol, ethoxylated (≥ 2.5 EO): Biodegradable; > 60 %; 60 d; anaerobic; OECD Test Guideline 311 Category approach
12.3 Bioaccumulative potential	
Bioaccumulation	isotrilinecanol, ethoxylated (≥ 2.5 EO): Bioaccumulation is unlikely. (literature value)
12.4 Mobility in soil	
Mobility	isotrilinecanol, ethoxylated (≥ 2.5 EO): Koc: > 5000 immobile strong adsorption to soil (literature value)
12.5 Results of PBT and vPvB assessment	
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

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Results of PBT assessment (vPvB) at levels of 0.1% or higher.
isotridecanol, ethoxylated (≥ 2.5 EO):
Based on available data, the classification criteria are not met.

12.6 Other adverse effects

General advice isotridecanol, ethoxylated (≥ 2.5 EO):
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Can be incinerated, when in compliance with local regulations.
waste code of the European Union: EWC The waste code must be determined in agreement with the regional waste disposal authority or company. A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

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

14.2 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

ADR	Not dangerous goods
RID	Not dangerous goods
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

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

Ship type	2
Pollution category	Y
Remarks	MARPOL NAME: Alcohol (C12–C16) poly(7-19) ethoxylates

SECTION 15: REGULATORY INFORMATION

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

Occupational restrictions Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

NATIONAL/OTHER REGULATIONS

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.

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NOTIFICATION STATUS

Switzerland. Consolidated Inventory	CH INV	listed (product or constituents are listed)
US. Toxic Substances Control Act	TSCA	listed (product or constituents are listed)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	DSL	listed (product or constituents are listed)
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	listed (product or constituents are listed)
Japan. Kashin-Hou Law List	ENCS (JP)	listed (product or constituents are listed)
Japan. Industrial Safety & Health Law (ISHL) List	ISHL (JP)	listed (product or constituents are listed)
Korea. Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances	INV (CN)	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**isotridecanol, ethoxylated (>= 2.5 EO)**

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.**

H302	Harmful if swallowed.
H318	Causes serious eye damage.

Safety datasheet sections which have been updated:

- 3. Composition/information on ingredients
- 15. 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

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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
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 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