MARLOPHEN NP 9

Version: *10*.02 **Revision Date 2019/04/09**

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

1.1 Product identifier

Trade name	**MARLOPHEN NP 9**
Substance name (REACH / CLP)	4-Nonylphenol, branched, ethoxylated (>=2.5 EO) (CAS: 127087-87-0)

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

Use	Industrial use raw material for textile auxiliary agents emulsifying agent 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 Germany 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

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage Category 1	Causes serious eye damage.
Acute toxicity Category 4 (Oral)	Harmful if swallowed.
Long-term (chronic) aquatic hazard Category 2	Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word	Danger
Hazard statements	
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
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.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

None known.

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

4-Nonylphenol, branched, ethoxylated (>=2.5 EO)

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

EC-No.: 932-098-4 **Index-No.:** **CAS-No.:** 127087-87-0
REACH No.: Not relevant (polymer)
Substance name (REACH / CLP): 4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)

Classification (Regulation (EC) No 1272/2008):	Acute Tox. 4 (Oral)	H302	
	Eye Dam. 1	H318	
	Aquatic Chronic 2		H411

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.

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

Other data Synonyms: CAS-No.: 9016-45-9; 68412-54-4; 37205-87-1

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	Provide fresh air.
In case of skin contact	Wash off with plenty of water.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.
If swallowed	Rinse mouth. 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.

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.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Dangerous gases or fumes may occur in case of fire. Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	Cool closed containers exposed to fire with water spray. Closed container may rupture if strongly heated. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment.
Special precautions	Forms slippery/greasy layers with water. Spilling onto the container's outside will make container slippery. Danger of slipping after spill or leakage.

6.2 Environmental precautions

Environmental precautions	Should not be released into the environment.

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	No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Storage class (TRGS 510)	10: Combustible liquids
Other data	Stable under normal conditions.

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

No data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

DERIVED NO EFFECT LEVEL (DNEL)

Substance name: 4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)

No data available

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: 4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)

No data available

8.2 Exposure controls

ENGINEERING MEASURES

Provide sufficient air exchange and/or exhaust in work rooms.

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	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). **gloves suitable for permanent contact:** Material: butyl-rubber Break through time: >= 480 min Layer thickness: >= 0.7 mm **gloves suitable for splash protection:** Material: Nitrile rubber/nitrile latex Break through time: >= 30 min Layer thickness: >= 0.4 mm
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear suitable protective equipment.
Hygiene measures	Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.
Protective measures	Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice	Should not be released into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

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

Colour	colorless to yellow
Odour	mild
Odour Threshold	No valid method available
pH	5 - 7; 20 g/l; DIN EN 1262
Melting point/range	ca. 10 °C
Boiling point/boiling range	No data available
Flash point	ca. 240 °C; DIN 51376
Evaporation rate	No data available
Flammability (solid, gas)	not applicable (liquid)
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	< 0.01 hPa; 20 °C
Relative vapour density	> 1
Density	ca.1.06 g/cm3; 20 °C; DIN 51757
Water solubility	completely miscible
Partition coefficient: n-octanol/water	Not applicable
Ignition temperature	ca. 400 °C; DIN 51794
Auto-ignition temperature	not auto-flammable
Viscosity, dynamic	ca. 350 mPas; 20 °C
Explosive properties	not expected based on structure and functional groups
Oxidizing properties	not expected based on structure and functional groups

9.2 Other data

Additional advice	no data

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	No dangerous reaction known under conditions of normal use.

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 oxidizing agents; hydrogen peroxide

10.6 Hazardous decomposition products

Hazardous decomposition products Stable under normal conditions.

Thermal decomposition Stable under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
LD50 Rat: > 300 - 2,000 mg/kg
own test results/literature values
Category approach
Harmful if swallowed.

Acute inhalation toxicity
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
(literature value)
Category approach

Acute dermal toxicity
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
LD50 Rabbit: > 2,000 mg/kg;
(literature value)
Category approach
Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
Rabbit: not irritating
own test results/literature values
Category approach
Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
Rabbit: Irreversible effects on the eye
own test results/literature values
Category approach
Causes serious eye damage.

Respiratory or skin sensitisation

Sensitisation
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
Patch-Test Human: not sensitizing
(literature value)
Category approach
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro
4-Nonylphenol, branched, ethoxylated (>=2.5 EO):
In vitro tests did not show mutagenic effects
own test results/literature values
Category approach

Genotoxicity in vivo	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): In vivo tests did not show mutagenic effects (literature value) Category approach
Remarks	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Animal testing did not show any carcinogenic effects. (literature value) The substance has been shown to be not genotoxic, therefore it is not expected to have a carcinogenic potential. Category approach
Remarks	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Animal testing did not show any effects on fertility. (literature value) Category approach
Teratogenicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Rat; Oral NOAEL: 50 mg/kg (based on body weight and day) NOAEL (pregnant female): 50 mg/kg (based on body weight and day) (literature value) Category approach
Remarks-Teratogenicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

STOT - single exposure

Remarks	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Remarks	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): No data available

Aspiration hazard

Aspiration toxicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): LC50 (96 h) Brachydanio rerio (zebrafish): > 1 - 10 mg/l ; semi-static test; OECD Test Guideline 203 own test results/literature values Category approach
Toxicity to fish - Chronic toxicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): No data available
Toxicity to daphnia and other aquatic invertebrates	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): EC50 (48 h) Daphnia magna (Water flea): > 10 - 100 mg/l ; static test; OECD Test Guideline 202 own test results/literature values Category approach
Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): No data available
Toxicity to aquatic plants	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): EC50 (72 h) algae: > 1 - 10 mg/l ; static test; OECD Test Guideline 201; own test results/literature values Category approach
	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): NOEC (72 h) algae: > 0.1 - 1 mg/l ; static test; OECD Test Guideline 201; own test results/literature values Category approach
Toxicity to bacteria	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): EC50 Pseudomonas putida: > 10,000 mg/l; oxygen consumption test Category approach
Toxicity to soil dwelling organisms	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): LC50 (14 d) Eisenia foetida: > 1,000 mg/kg; artificial soil Category approach
Toxicity for other terrestrial non-mammalian fauna	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): The study is not necessary. low bioaccumulation potential Accumulation in terrestrial organisms is unlikely.

12.2 Persistence and degradability

Biodegradability	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Not readily biodegradable.; < 60 %; 28 d; aerobic; OECD Test Guideline 301B own test results/literature values Category approach

12.3 Bioaccumulative potential

Bioaccumulation	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Bioconcentration factor (BCF): ca. 15 - 53; calculated Bioaccumulation is unlikely.

12.4 Mobility in soil

Mobility	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): No data available

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 (vPvB) at levels of 0.1% or higher.
Results of PBT assessment	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

12.6 Other adverse effects

General advice	4-Nonylphenol, branched, ethoxylated (>=2.5 EO): Toxic to aquatic life with long lasting effects.

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	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. The waste code must be determined in agreement with the regional waste disposal authority or company.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR	3082
RID	3082
ADN	3082
IMDG	3082
ICAO/IATA	3082

14.2 Proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isononylphenol, ethoxylated)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isononylphenol, ethoxylated)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isononylphenol, ethoxylated)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isononylphenol, ethoxylated)
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isononylphenol, ethoxylated)

14.3 Transport hazard class

ADR	9
RID	9
ADN	9
IMDG	9
ICAO/IATA	9

14.4 Packing group

ADR	III
RID	III
ADN	III
IMDG	III
ICAO/IATA	III

14.5 Environmental hazards

ADR	Environmentally hazardous	yes
RID	Environmentally hazardous	yes
ADN	Environmentally hazardous	yes
IMDG	Marine pollutant	yes
ICAO/IATA	Environmentally hazardous	yes

14.6 Special precautions for user

ADR	Hazard Identification Number	90
	Labels	9
	Tunnel restriction code	(-)
IMDG	Labels 9	
	EmS Number 1 F-A	
	EmS Number 2 S-F	
ICAO/IATA	Labels	9MI

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

Remarks No information available.

SECTION 15: REGULATORY INFORMATION

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

EU REGULATIONS /INTERNATIONAL REGULATIONS

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

The product contains following substances that are listed on the named regulation/list:

Substance name	**CAS-No.** **EC-No.**	**content**
4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)	127087-87-0 932-098-4	<= 100 %

EU 689/2008: Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals

Listed

The product contains following substances that are listed on the named regulation/list:

Substance name	**CAS-No.** **EC-No.**	**content**
4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)	127087-87-0 932-098-4	<= 100 %

EU RA17: Regulation (EC) No 1907/2006; ANNEX XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

Listed

46. b) Nonylphenol ethoxylates (C2 H4 O)n C15 H24 O

EUREACHXIV: Regulation (EC) No 1907/2006 ; ANNEX XIV: LIST OF SUBSTANCES SUBJECT TO AUTHORISATION

Listed

43. 4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof) EC No: — CAS No: —

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:: ENVIRONMENTAL HAZARDS; E2 Qualifiying quantity 1: 200 t; Qualifiying quantity 2: 500 t;
Other regulations	Directive 2003/53/EC relating to restrictions on the marketing and use of certain dangerous substances and preparations (nonylphenol, nonylphenol ethoxylate and cement)

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 (IECSC)	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

4-Nonylphenol, branched, ethoxylated (>= 2.5 EO) (CAS: 127087-87-0)

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.
H411	Toxic to aquatic life with long lasting effects.

Safety datasheet sections which have been updated:

3. Composition/information on ingredients
8. Exposure controls/personal protection

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
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