

**MARLOPHEN NP 30**

Version: 8.03

Revision Date 19.09.2017

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

<b>Trade name</b>	<b>Marlophen NP 30</b>
<b>Substance name (REACH / CLP)</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0)

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

<b>Use</b>	Industrial use raw material for textile auxiliary agents emulsifying agent surface-active substance
<b>Uses advised against</b>	

**1.3 Details of the supplier of the safety data sheet**

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

**1.4 Emergency telephone number**

<b>Emergency telephone number</b>	+ 49 (0) 23 65 - 49 22 32
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**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

<b>Classification (REGULATION (EC) No 1272/2008)</b>	
Chronic aquatic toxicity Category 3	Harmful to aquatic life with long lasting effects.

**2.2 Label elements**

<b>Labelling (REGULATION (EC) No 1272/2008)</b>	
<b>Hazard statements</b>	
H412	Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	
P273	Avoid release to the environment.
P501	Dispose of contents/ container to an approved waste disposal plant.

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### 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 ( $\geq 2.5$ EO) (CAS: 127087-87-0)

content:  $\geq 90$  -  $\leq 100$  %

component type: Active ingredient

EC-No.:

Index-No.:

CAS-No.: 127087-87-0

REACH No.: Not relevant (polymer)

Substance name (REACH / CLP): 4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$  EO) (CAS: 127087-87-0)

Classification (Regulation (EC) No 1272/2008):	Aquatic Chronic	3	H412
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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

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

### 4.2 Most important symptoms and effects, both acute and delayed

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

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

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**5.1 Extinguishing media**

**Suitable extinguishing media** Water spray, Dry powder, Foam, Carbon dioxide (CO<sub>2</sub>)

**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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**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** Sweep up and shovel into suitable containers for disposal. The material taken up must be disposed of in accordance with regulations.

**6.4 Reference to other sections**

For personal protection see section 8.

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**SECTION 7: HANDLING AND STORAGE**

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**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**

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**Storage class (TRGS 510)** 11: Combustible Solids  
**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)**

No data available

**Predicted No Effect Concentration (PNEC)**

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:**

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Material: Nitrile rubber/nitrile latex  
 Break through time:  $\geq$  30 min  
 Layer thickness:  $\geq$  0,4 mm

<b>Eye protection</b>	Tightly fitting safety goggles
<b>Hygiene measures</b>	Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.
<b>Protective measures</b>	Wear suitable gloves and eye/face protection.

### ENVIRONMENTAL EXPOSURE CONTROLS

<b>General advice</b>	Should not be released into the environment.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	solid; 20 °C; 1.013 hPa
<b>Form</b>	pasty
<b>Colour</b>	colorless to yellow
<b>Odour</b>	mild
<b>Odour Threshold</b>	No data available
<b>pH</b>	5 - 7
<b>Melting point/range</b>	> 25 °C
<b>Flash point</b>	> 250 °C; DIN 51376
<b>Evaporation rate</b>	Not relevant / not applicable Justification: Solid
<b>Flammability (solid, gas)</b>	not auto-flammable
<b>Lower explosion limit</b>	Not applicable Justification: Solid
<b>Upper explosion limit</b>	Not applicable Justification: Solid
<b>Vapour pressure</b>	< 0,01 hPa; 20 °C
<b>Relative vapour density</b>	No data available
<b>Density</b>	1,07 - 1,08 g/cm <sup>3</sup> ; 20 °C
<b>Relative density</b>	No data available
<b>Water solubility</b>	miscible
<b>Partition coefficient: n-octanol/water</b>	Not applicable
<b>Ignition temperature</b>	ca. 400 °C
<b>Auto-ignition temperature</b>	not auto-flammable

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<b>Viscosity, dynamic</b>	100 mPas; 50 °C; ISO 2555
<b>Explosive properties</b>	not expected based on structure and functional groups
<b>Oxidizing properties</b>	not expected based on structure and functional groups

**9.2 Other data**

None known.

**SECTION 10: STABILITY AND REACTIVITY**

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**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**

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**11.1 Information on toxicological effects****Acute toxicity**

**Acute oral toxicity** 4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$  EO) (CAS: 127087-87-0):  
LD50 Rat: > 2.000 mg/kg  
own test results/literature values  
Category approach  
Based on available data, the classification criteria are not met.

**Acute inhalation toxicity** 4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$  EO) (CAS: 127087-87-0):  
No data available

**Acute dermal toxicity** 4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$  EO) (CAS: 127087-87-0):  
LD50 Rabbit: > 2.000 mg/kg;  
(literature value)  
Category approach  
Based on available data, the classification criteria are not met.

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<b>Skin irritation</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Rabbit: slightly irritating own test results/literature values Category approach Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	
<b>Eye irritation</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Rabbit: slightly irritating own test results/literature values Category approach Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitisation</b>	
<b>Sensitisation</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): not expected based on structure and functional groups
<b>Germ cell mutagenicity</b>	
<b>Genotoxicity in vitro</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Ames test; Salmonella typhimurium; with and without metabolic activation: not mutagenic; OECD Test Guideline 471 own test results/literature values Category approach
<b>Remarks</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	
<b>Carcinogenicity</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): This information is not available.
<b>Reproductive toxicity</b>	
<b>Reproductive toxicity</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): This information is not available.
<b>STOT - single exposure</b>	
<b>Remarks</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): The substance or mixture is not classified as specific target organ toxicant, single exposure.
<b>STOT - repeated exposure</b>	
<b>Remarks</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
<b>Aspiration hazard</b>	
<b>Aspiration toxicity</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Not applicable

**SECTION 12: ECOLOGICAL INFORMATION**

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## 12.1 Toxicity

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<b>Toxicity to fish</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): LC50 (96 h) Brachydanio rerio (zebrafish): $> 10 - 100$ mg/l ; semi-static test; OECD Test Guideline 203 own test results/literature values Category approach
<b>Toxicity to fish - Chronic toxicity</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>Toxicity to daphnia and other aquatic invertebrates</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): EC50 (48 h) Daphnia magna (Water flea): $> 10 - 100$ mg/l ; static test; OECD Test Guideline 202 own test results/literature values Category approach
<b>Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>Toxicity to aquatic plants</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): EC50 (72 h) Desmodesmus subspicatus (green algae): $> 10 - 100$ mg/l ; static test; OECD Test Guideline 201; own test results/literature values Category approach
<b>Toxicity to bacteria</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): EC50 Pseudomonas putida: $> 10.000$ mg/l; Cell multiplication inhibition test; ISO 10712 Category approach
<b>Toxicity to soil dwelling organisms</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): LC50 Eisenia foetida: $> 1.000$ mg/kg; mortality; artificial soil Category approach
<b>Toxicity to terrestrial flora</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>Toxicity for other terrestrial non-mammalian fauna</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>12.2 Persistence and degradability</b>	
<b>Biodegradability</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Not readily biodegradable.; $< 60$ %; 28 d; aerobic; OECD Test Guideline 301B Category approach own test results/literature values
<b>12.3 Bioaccumulative potential</b>	
<b>Bioaccumulation</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>12.4 Mobility in soil</b>	
<b>Mobility</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): No data available
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>Results of PBT assessment</b>	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.
<b>Results of PBT assessment</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Based on available data, the classification criteria are not met.
<b>12.6 Other adverse effects</b>	
<b>General advice</b>	4-Nonylphenol, branched, ethoxylated ( $\geq 2.5$ EO) (CAS: 127087-87-0): Harmful to aquatic life with long lasting effects.



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### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

<b>Product</b>	Can be incinerated, when in compliance with local regulations.
<b>waste code of the European Union: EWC</b>	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

<b>ADR</b>	Not dangerous goods
<b>RID</b>	Not dangerous goods
<b>ADN</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>ICAO/IATA</b>	Not dangerous goods

#### 14.2 Proper shipping name

<b>ADR</b>	Not dangerous goods
<b>RID</b>	Not dangerous goods
<b>ADN</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>ICAO/IATA</b>	Not dangerous goods

#### 14.3 Transport hazard class

<b>ADR</b>	Not dangerous goods
<b>RID</b>	Not dangerous goods
<b>ADN</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>ICAO/IATA</b>	Not dangerous goods

#### 14.4 Packing group

<b>ADR</b>	Not dangerous goods
<b>RID</b>	Not dangerous goods
<b>ADN</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>ICAO/IATA</b>	Not dangerous goods

#### 14.5 Environmental hazards

<b>ADR</b>	Environmentally hazardous	no
<b>RID</b>	Environmentally hazardous	no
<b>ADN</b>	Environmentally hazardous	no
<b>IMDG</b>	Marine pollutant	no

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ICAO/IATA	Environmentally hazardous	no
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### 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

Remarks	No information available.
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## 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 ( $\geq$ 2.5 EO) (CAS: 127087-87-0)	127087-87-0 932-098-4	$\leq$ 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 ( $\geq$ 2.5 EO) (CAS: 127087-87-0)	127087-87-0 932-098-4	$\leq$ 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 (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>15</sub> H<sub>24</sub> 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: —

#### 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

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### 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	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.

H412 Harmful to aquatic life with long lasting effects.

### Safety datasheet sections which have been updated:

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

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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