

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 16 Aug 2022

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

4-n-Nonylphenol

### 1.1. Catalog No.:

677203

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Acute toxicity, Oral (Category 4), H302  
Skin corrosion (Category 1B), H314  
Reproductive toxicity (Category 2), H361  
Chronic aquatic toxicity (Category 2), H411

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements  
Labelling according Regulation (EC) No 1272/2008  
Pictogram Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H361 Suspected of damaging fertility or the unborn child. H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ 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.

P310 Immediately call a POISON CENTER or doctor/ physician.

Supplemental Hazard

Statements

none

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : C<sub>15</sub>H<sub>24</sub>O

Molecular weight : 220,35 g/mol

CAS-No. : 104-40-5

EC-No. : 203-199-4

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

p-Nonylphenol Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

CAS-No.

EC-No.

104-40-5

203-199-4

Acute Tox. 4; Skin Corr. 1B;

Repr. 2; Aquatic Chronic 2;

H302, H314, H361, H411

&lt;= 100 %

#### 3.1.1. Formula

C<sub>15</sub>H<sub>24</sub>O

#### 3.1.2. Molecular Weight (g/mol)

220.35

### 3.1.3. CAS-No.

104-40-5

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

#### Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point

No data available

f) Initial boiling point and boiling range

No data available

g) Flash point 113 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower No data available flammability or explosive limits

k) Vapour pressure < 1 hPa at 20 °C

l) Vapour density No data available

m) Relative density 0,937 g/cm<sup>3</sup>

- n) Water solubility soluble
- o) Partition coefficient: noctanol/  
water  
log Pow: 5,76
- p) Auto-ignition  
temperature  
No data available
- q) Decomposition  
temperature  
No data available
- r) Viscosity No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available
- 9.2 Other safety information  
No data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
No data available
- 10.2 Chemical stability  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions  
No data available
- 10.4 Conditions to avoid  
No data available
- 10.5 Incompatible materials  
No data available
- 10.6 Hazardous decomposition products  
Other decomposition products - No data available  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
  - Acute toxicity  
LD50 Oral - Rat - 1.620 mg/kg
  - Skin corrosion/irritation  
No data available
  - Serious eye damage/eye irritation  
No data available
  - Respiratory or skin sensitisation  
No data available
  - Germ cell mutagenicity  
No data available
  - Carcinogenicity  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
  - Reproductive toxicity  
Suspected human reproductive toxicant
  - Specific target organ toxicity - single exposure  
No data available
  - Specific target organ toxicity - repeated exposure  
No data available
  - Aspiration hazard  
No data available
  - Additional Information  
RTECS: SM5630000  
In vitro and in vivo tests showed endocrine disruption activity., 4-NP has been identified as a Substance of Very High Concern (SVHC) and included into the Candidate List due to its endocrine disrupting properties

which cause probable serious effects to the environment

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,4 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates

LC50 - Daphnia pulex (Water flea) - 0,14 mg/l - 48 h

EC50 - Daphnia magna (Water flea) - 0,18 mg/l - 24 h

Toxicity to algae Growth inhibition NOEC - Algae - 0,243 mg/l - 4 Months

### 12.2 Persistence and degradability

4-NP is stable and strongly adsorbs into soil, sludge and sediment.

A DT50 of 46,2 days (primary degradation) to no elimination after 703 days (depending on linear or branched isomers ) was observed under anaerobic conditions in sediment.

### 12.3 Bioaccumulative potential

Bioaccumulation Gasterosteus aculeatus - 16 d

- 4,9 &#956;g/l

Bioconcentration factor (BCF): 1.300

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB 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.

### 12.6 Other adverse effects

Toxic to aquatic life with long lasting effects.

Available toxicity data for nonylphenol, branched and linear, ethoxylated (4-NPnEO and NPnEO) are summarized in order to analyze whether or not they rise to an equivalent concern with regard to their endocrine disruption properties. Short term exposure to 4-NP may result in life time effects in aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber Contaminated packaging

Dispose of as unused product

## 14. TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 2430 IMDG: 2430 IATA: 2430

### 14.2 UN proper shipping name

ADR/RID: ALKYLPHENOLS, SOLID, N.O.S.

IMDG: ALKYLPHENOLS, SOLID, N.O.S.

IATA: Alkylphenols, solid, n.o.s.

### 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8  
14.4 Packaging group  
ADR/RID: II IMDG: II IATA: II  
14.5 Environmental hazards  
ADR/RID: no IMDG Marine pollutant: no IATA: no  
14.6 Special precautions for user  
No data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.  
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
Authorisations and/or restrictions on use  
p-Nonylphenol CAS-No.: 104-40-5  
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).  
Equivalent level of concern having probable serious effects to the environment (article 57 f)  
ED/169/2012  
p-Nonylphenol CAS-No.: 104-40-5  
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals  
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Chemical qualifying for PIC notification.  
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Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals  
Chemical qualifying for PIC notification.  
15.2 Chemical Safety Assessment  
For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.  
The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!