4-Nonylphenol: sc-256816



MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: 4-Nonylphenol
Catalog Number: sc-256816

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue

Santa Cruz, California 95060 800.457.3801 or 831.457.3800

Emergency: ChemWatch

Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture



GHS08 Health hazard

H361 Suspected of damaging fertility or the unborn child.



GHS05 Corrosion

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.



GHS09 Environment

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.



GHS07

H302 Harmful if swallowed.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22-62-63: Harmful if swallowed. Possible risk of impaired fertility. Possible risk of

harm to the unborn child.

*

N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Label elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:

C Corrosive

N Dangerous for the environment

Risk phrases:

22 Harmful if swallowed.

34 Causes burns.

62 Possible risk of impaired fertility

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety phrases:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately.

If swallowed, seek medical advice immediately and show this container or label.

60 This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/Safety data sheets

Hazard description: WHMIS classification



Classification system HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)



 $\begin{array}{ll} \textit{Health (acute effects)} = 2 \\ \textit{Flammability} = 1 \\ \textit{Reactivity} = 1 \end{array}$

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

(CAS#) Description:

4-n-Nonylphenol (CAS# 104-40-5): 100%

Identification number(s):
EINECS Number: 203-199-4

4 First aid measures

Description of first aid measures

General information Immediately remove any clothing soiled by the product.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed. Store at room temperature.

Store in cool, dry conditions in well sealed containers.

8 Exposure controls/personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection:

Safety glasses

Tightly sealed goggles

Full face protection

Body protection: Protective work clothing.

9 Physical and chemical properties

| Information on basic physical and chemical General Information | properties |
|--|---|
| Appearance: | |
| Form: | Crystalline |
| Formula: | C15H24O |
| Weight: | 220.35 |
| pH-value: | Not applicable. |
| Change in condition | |
| Melting point/Melting range: | Not determined |
| Boiling point/Boiling range: | Not determined |
| Sublimation temperature / start: | Not determined |
| Flash point: | > 110°C (> 230 °F) |
| Flammability (solid, gaseous) | Not determined. |
| Ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Auto igniting: | Not determined. |
| Danger of explosion: | Product does not present an explosion hazard. |
| Explosion limits: | |
| Lower: | Not determined |
| Upper: | Not determined |
| Vapor pressure: | Not applicable. |
| Density at 20°C (68 °F): | 0.937 g/cm³ (7.819 lbs/gal) |
| Relative density | Not determined. |
| Vapour density | Not applicable. |
| Evaporation rate | Not applicable. |
| Segregation coefficient (n-octonol/water): | Not determined |

Viscosity: dynamic:

kinematic: Other information Not applicable. Not applicable.

No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral LD50 1620 mg/kg (rat)

Primary irritant effect:

on the skin:

Corrosive effect on skin and mucous membranes.

Irritant to skin and mucous membranes.

on the eye:

Strong corrosive effect.

Irritating effect.

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):

Reproductive effects have been observed on tests with laboratory animals.

Subacute to chronic toxicity:

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Reproductive - Maternal Effects - menstrual cycle changes or disorders.

Reproductive - Maternal Effects - uterus, cervix, vagina.

Reproductive - Maternal Effects - other effects.

Reproductive - Effects on Newborn - growth statistics (e.g.%, reduced weight gain). Reproductive - Effects on Newborn - behavioral.

Related to Chronic Data - changes in uterine weight.

Subacute to chronic toxicity:

Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure.

Additional toxicological information:

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity

Acquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxical effects:

Remark: Very toxic for aquatic organisms

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits. Very toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

DOT regulations:



Hazard class:

Identification number: UN2430 Packing group: III

Proper shipping name (technical name): ALKYLPHENOLS, SOLID, N.O.S.

Land transport ADR/RID (cross-border)





ADR/RID class: 8 (C4) Corrosive substances

Danger code (Kemler): 80 UN-Number: 2430 Packaging group: III

Special marking: Symbol (fish and tree)

UN proper shipping name: 2430 ALKYLPHENOLS, SOLID, N.O.S.

Maritime transport IMDG:



IMDG Class: 8 UN Number: 2430 Label 8 Packaging group: III

Marine pollutant: Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S.

No

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 8 UN/ID Number: 2430 Label 8 IIIPackaging group:

Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S.

UN "Model Regulation": UN2430, ALKYLPHENOLS, SOLID, N.O.S., 8, III

Environmental hazards: Environmentally hazardous substance, solid; Marine Pollutant Special precautions for user Warning: Corrosive substances

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

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

Product related hazard informations:

Hazard symbols:

C Corrosive

N Dangerous for the environment

Risk phrases:

- 22 Harmful if swallowed.
- 34 Causes burns.
- Possible risk of impaired fertility 62

- 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- Possible risk of harm to the unborn child

Safety phrases:

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 45 In case of accident or if you feel unwell, seek medical advice immediately.
- If swallowed, seek medical advice immediately and show this container or label.
- This material and its container must be disposed of as hazardous waste. 60
- Avoid release to the environment. Refer to special instructions/Safety data sheets 61

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

Information about limitation of use: For use only by technically qualified individuals. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

02/06/13