



# MATERIAL SAFETY DATA SHEET

## NONYLPHENOL

Version: 1.3  
Date of Issue: 06/26/2007  
Date printed: 06/13/2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name :** NONYLPHENOL

**Chemical name:** Phenol,4-nonyl,branched

**Use of substance/preparation:** Chemical intermediate

**Supplier:** Chemtura Corporation  
199 Benson Road  
Middlebury, CT 06749 USA

**Emergency telephone number:** CHEMTREC (24 hours) 800-424-9300  
Chemtura Corporation Emergency Response (24 hours) 800-292-5898

**Environmental, Health and Safety Department:** 866-430-2775  
**Prepared by** Product Safety Department Date of Issue: 06/26/2007  
(US) +1 866-430-2775  
(EU) +44 (0) 1753.603.000  
Email: MSDSRequest@chemtura.com

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

#### WARNING!

HARMFUL AND CORROSIVE IF SWALLOWED.

SLIGHTLY TOXIC.

MAY BE IRRITATING OR CORROSIVE TO THE SKIN AND/OR EYES.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	% BY WEIGHT
Nonylphenol CAS# 84852-15-3	>= 99.8
Phenol CAS# 108-95-2	<= 0.2



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### 4. FIRST AID MEASURES

#### Swallowing

Do not induce vomiting. Rinse mouth with water. Give two glasses of milk or water at once. Obtain medical attention in all cases.

#### Inhalation

Remove to fresh air. Obtain medical attention immediately.

#### Skin contact

Remove contaminated clothing. Rinse affected skin with copious amounts of water, using a mild cleaning agent. Obtain medical attention if contact has been widespread and prolonged, or if irritation persists.

#### Eye contact

Remove contact lenses, if worn. Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

### 5. FIRE-FIGHTING MEASURES

Flash point: 280 °F 138 °C  
Autoignition temperature: Not available

#### NFPA CLASSIFICATION

Health: 2	Flammability: 1	Reactivity: 0	Special provisions:
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#### Hazardous combustion products

Oxides of carbon.  
Carbon dioxide.  
Carbon monoxide.  
Hydrocarbons.

#### Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes.

#### Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear.  
Self-contained breathing apparatus.

#### Extinguishing media

Suitable: Large fires:  
- alcohol-type foam or universal-type foams  
Small fires:  
- CO2  
- dry chemical  
Unsuitable: - water jets

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Wear suitable protective equipment., Avoid contact with eyes and skin.

#### Environmental precautions

Prevent from entering sewer system, surface water or soil.

#### Methods for cleaning up

Observe government regulations.



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**Small spills:** Absorb on inert material such as sand, earth, vermiculite.  
Collect for disposal.

**Large spills** Dike to contain spill.  
Pump excess material into suitable container (metal drums, metal tank, or such).

## 7. HANDLING AND STORAGE

### HANDLING

#### Handling precautions

Do not get in eyes., Avoid prolonged or repeated contact with skin., Avoid breathing vapor., Use with adequate ventilation., Wash thoroughly after handling.

### STORAGE

#### Storage requirements

Store in a cool, dry place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Phenol	USA	TWA, ACGIH	5ppm	
	Australia	TWA	4 mg/m3 1 ppm	

### PERSONAL PROTECTION

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

#### Hand protection / protective gloves

Chemical resistant protective gloves

#### Eye protection

Safety glasses with side shields.

#### Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

#### Other protective equipment

Eye bath, Safety shower

### ENGINEERING CONTROLS

#### Ventilation

General (mechanical) room ventilation is expected to be satisfactory., Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Physical state	Liquid
Color	Colorless
Odor	Mild



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### OTHER PROPERTIES

Melting point	Melting point 1 °C 34 °F
Specific gravity (H2O=1)	0.95
Solubility in water	Insoluble
Partitioning coefficient	Not available
Flash point	280 °F 138 °C
Autoignition temperature	Not available
Percent volatiles	Not available

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### 10. STABILITY AND REACTIVITY

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Stability: Stable under normal conditions.

Incompatible materials:  
Strong oxidizing agents.

Hazardous reactions: No data available.

Hazardous combustion products:  
Oxides of carbon.  
Carbon dioxide.  
Carbon monoxide.  
Hydrocarbons.

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### 11. TOXICOLOGICAL INFORMATION

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#### SWALLOWING

Test results

Acute toxicity: LD50 Rat  
Result: 1,246 - 2,462 mg/kg

#### SKIN CONTACT

Test results

Skin irritation: Result: Severe irritation

#### EYE CONTACT

Test results

Eye irritation: Result: Severe irritation

#### SENSITIZATION

Test results:

Species: - Guinea pigs  
Result: Negative



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### 12. ECOLOGICAL INFORMATION

#### AQUATIC TOXICITY

Acute toxicity fish: - LC50 - Sheepshead minnow (*Cyprinodon variegatus*):  
Result: 0.31 mg/l  
Exposure time: 96 h

<u>Component ecotoxicology</u> Phenol <u>Acute toxicity fish:</u>	Acute toxicity fish LC50 - Rainbow trout ( <i>Salmo gairdneri</i> ) Result: 5 - 12 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> Phenol <u>Acute toxicity fish:</u>	Acute toxicity fish LC50 - Golden orfe ( <i>Leuciscus idus</i> ) Result: 14 - 25 mg/l Exposure time: 48 h
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<u>Component ecotoxicology</u> Phenol <u>Microorganisms:</u>	Bacterial toxicity EC50 - Result: 10 - 30,000 mg/l
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<u>Component ecotoxicology</u> Phenol <u>Microorganisms:</u>	Acute algae toxicity NOEC - Result: 7.5 - 100 mg/l
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### 13. DISPOSAL CONSIDERATIONS

**General:** Dispose of in accordance with appropriate Federal, State, and local regulations., Avoid discharge to sewers and natural waters.

### 14. TRANSPORT INFORMATION

#### DOT Classification

If this product is transported in bulk quantities, then it is also regulated as MARINE POLLUTANT.

**Proper shipping name:** Alkylphenols, liquid, n.o.s.  
**Class:** 8  
**UN ID #:** UN3145  
**Packing group:** III  
**marine pollutant:** MARINE POLLUTANT

#### IMDG Classification

**Proper shipping name:** Alkylphenols, liquid, n.o.s.  
**Class:** 8  
**Subsidiary risk:** marine pollutant  
**UN ID #:** UN 3145  
**Packing group:** III

#### ICAO Classification

**Proper shipping name:** Alkylphenols, liquid, n.o.s.  
**Class:** 8  
**UN ID #:** UN 3145  
**Packing group:** III



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### 15. REGULATORY INFORMATION

#### New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name CAS#  
Nonylphenol 84852-15-3  
Phenol 108-95-2

New Jersey TS Number

#### CHEMICAL INVENTORY

Canada: This product is on the DSL.  
Europe: The ingredients of this mixture are on the EINECS inventory.  
United States: This product is on the TSCA inventory.  
Australia: This product is on the AICS inventory.  
China: This product is on the IECSC Inventory.  
Japan: This product is on the ENCS inventory.  
Korea: This product is listed on the Existing Chemicals List (ECL).  
Philippines: This product is on the PICCS.

### 16. OTHER INFORMATION

#### HMIS RATING

Health: 2	Flammability: 1	Reactivity: 0	PPI: X
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STP	Standard temperature and pressure
W/W	Weight/Weight 0 (HMIS)
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

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Corporation

THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.

## POTENTIAL HAZARDS

### HEALTH

- **TOXIC**; inhalation, ingestion or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

### FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.
- Runoff may pollute waterways.
- Substance may be transported in a molten form.

## PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.
- Keep unauthorized personnel away.
- Stay upwind. • Keep out of low areas. • Ventilate enclosed areas.

### PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations **ONLY**; it is not effective in spill situations where direct contact with the substance is possible.

### EVACUATION

#### Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

- If tank, rail car or tank truck is involved in a fire, **ISOLATE** for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

**EMERGENCY RESPONSE****FIRE****Small Fires**

- Dry chemical, CO<sub>2</sub> or water spray.

**Large Fires**

- Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

**Fire Involving Tanks or Car/Trailer Loads**

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

**SPILL OR LEAK**

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

**FIRST AID**

- Move victim to fresh air. • Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.