

MATERIAL SAFETY DATA SHEET

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Rokafenol N6

1. Identification of the substance and of the company

Product name

Trade name: Rokafenol N6

Application

Rokafenol N6 is a non-ionic surfactant used as a component of cleaning and washing agents, as well as an emulsifier.

Rokafenol N6 can be used in oxidizing, reducing and hard water environments. It is active in cold water, in an acid and neutral bath, as well as in diluted alkalis.

Rokafenol N6 can be used in a mixture with other non-ionic auxiliary agents and in mixtures with anionic and cationic surface active agents.

EU regulations limit the application of Rokafenol N6 to industrial cleaning, textile and leather treatment, as well as metal treatment with the use of closed-circuit systems in which the working liquid is recirculated or combusted.

Producer

PCC Rokita SA, ul. Sienkiewicza 4, 56-120 Brzeg Dolny, Poland

Specialty Chemicals Business Unit

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Emergency telephone number:

Telephone: (+4871) 319 25 55, 319 24 41 or 319 26 90 (fax) at PCC Rokita SA or the closest local Fire Brigade

2. Composition / information on ingredients

Chemical name:	Nonylphenylpolyoxyethylene ether	
Molecular formula:	$C_{27}H_{48}O_7$	
Component names:	Nonylphenylpolyoxyethylene ether (6) (min. 99% m/m)	Water (max. 1% m/m)
Hazard symbol:	Xi; R36/38	
Index number:	-	
CAS number(s):	9016-45-9; 26027-38-3(R); 37205-87-1(R); 26571-11-9; 27177-01-1; 68412-54-4, (R) – generic	
EC Number (EINECS):	500-024-6	
Additional information:	INCI name: Nonoxynol-6	

3. Hazards identification

Irritant (Xi).

Irritating to eyes and skin (R 36/38).

Rokafenol N6 stored in appropriate polyethylene containers or drums as specified in sec. 7 poses no hazard.

4. First aid measures

Inhalation

Under normal conditions poses no hazard.

Skin contact

Take off all contaminated clothing. After contact with skin, wash with soap and water. Launder clothing before reuse.

Eye contact

Irrigate copiously with fresh water for at least 15 minutes. Consult ophthalmologist.

Ingestion

Do not induce vomiting (risk of choking because of substance foaming). Make sure the respiratory system is free. Put the casualty in the recovery position. Seek medical attention.

Additional information

Toxicological effect/exposure symptoms: contact of the liquid with skin causes skin drying out, eye contact causes irritation.

Notes to physician: no special detoxifier or antidote. Apply symptomatic treatment. Persons who inhaled fumes (e.g. produced during a fire) must remain under medical supervision for at least 24-48 hours.

5. Fire fighting measures**Suitable extinguishing media**

Extinguish with water spray, foam, carbon-dioxide or dry powder.

Extinguishing media which must not be used for safety reasons

Not known.

Special hazards

Cool down drums exposed to fire or high temperature with water spray and, if possible, remove from the hazardous area.

Special protective equipment for fire-fighters

Fire-fighters staying in the hazardous area must wear suitable protective clothing and protective equipment.

6. Accidental release measures**Personal precautions**

Avoid contact with the substance.

Environmental precautions

Prevent penetration into drains or sewage systems, ground or surface water and soil.

Methods for cleaning / disposal

If possible, eliminate the spill (e.g. seal tight, place the damaged packaging in an emergency packaging). Contain the spreading of the spill by bunding. Soak up the spill with absorbent material (e.g. earth, sand), collect into a container and recycle or dispose of in compliance with the regulations in force (see sec. 13). Wash the contaminated area with water.

Additional information

Spill may cause surface to be slippery.

7. Handling and storage**Handling**

Handle in compliance with general safety and industrial hygiene standards. Prevent access of unauthorised persons.

Storage

Store in a tightly closed container in a roofed area, at a temperature of up to 40 °C. Guaranteed period of stability: 12 months from the date of manufacture. After the expiry of this period, the product can be used upon verifying the conformity of its parameters with the technical requirements. In case of non-conformity, application tests should be performed.

Specific applications

Not known.

8. Exposure controls/personal protection

Exposure control parameters

MAC (TWA) and MAC (STEL): not specified.

Personal protective equipment:

Respiratory protection

Not required in normal use.

Eye and face protection

Required – wear tightly fitting safety goggles if there is a risk of direct contact.

Hand protection

Required – rubber gloves.

Skin protection

Protective clothing.

Hygiene measures

Avoid clothing contamination. Wash hands and face after use. When using do not eat or drink.

9. Physical and chemical properties

Appearance:

oily liquid

Colour:

colourless to straw

Odour:

weak, characteristic

pH:

5.0-7.0 (1% aqueous solution)

Temperature

solidification:

below 0⁰C

boiling:

no data available

flash-point:

above 200⁰C

self-ignition:

no data available

Flammability:

flammable

Explosive properties

upper and lower explosion limit:

not applicable

Oxidizing properties:

not applicable

Vapour pressure:

negligible at room temperature

Relative density:

approx. 1.03 g/ml at 20⁰C

Solubility

in water:

low, creates emulsion

in organic solvents:

mineral oils, ethyl alcohol, methyl alcohol

Partition coefficient: n-octanol/water:

no data available

Other properties:

hydrophilic-lipophilic balance (HLB) approx. 11
viscosity at 20⁰C: 320 mPa·s

10. Stability and reactivity

Stability

Product stable under normal conditions.

Conditions to avoid

During storage avoid temperatures outside the range specified in sec. 7

Materials to avoid

Product reacts with strong oxidizing agents

Hazardous decomposition products

Carbon oxide, organic partial decomposition products

11. Toxicological information

Acute oral toxicity	LD ₅₀ (rat) of 5,900 mg/kg
Inhalation toxicity	No data available
Skin contact	Skin contact of the undiluted substance and its concentrated aqueous solutions may cause inflammatory reaction
Eye contact	One-time contact of undiluted product with eyes causes chronic conjunctivitis, eyelid swelling and damage, as well as permanent cornea turbidity
Ingestion	No data available

12. Ecological information

Ecotoxicity	No data available
Mobility	Known or predicted distribution to environmental compartments – hard-volatile product, soluble in water (creates emulsions) After dissolving in water may penetrate to groundwater
Persistence and degradability	
Persistence	Biodegradation above 83%, specified in compliance with 82/242/EEC
Degradability	Rokafenol N6 decomposition leads to the formation of nonylphenol which is much less biologically degradable Nonylphenol can accumulate in sewage sludge
Bioaccumulation potential	Nonylphenol formed during the decomposition of Rokafenol N6 may bioaccumulate
Other adverse effects	Rokafenol N6 may cause foaming in a wastewater treatment plant

13. Disposal Considerations

Product

Do not dispose of to drains or sewage system. Prevent penetration into ground or surface water. Do not landfill inert waste. Waste product should be recycled or neutralized in compliance with the regulations in force (Waste Act) in facilities or equipment that meet relevant requirements (authorized plants or producer).

Packaging

Empty packaging should be treated as hazardous waste. Packaging can be re-used if thoroughly washed several times with water or treated using an equivalent cleaning procedure. Best results are obtained by washing immediately after emptying the packaging. Recycling or neutralization of the packaging should comply with the regulations in force (Packaging and Packaging Waste Act).

14. Transport information

Road transport ADR/RID	Limitations resulting from ADR and RID regulations do not apply Covered means of transport recommended
Sea transport IMDG	Limitations resulting from IMDG regulations do not apply
Air transport ICAO-TI and IATA-DGR	No data available

15. Regulatory information

This Material Safety Data Sheet has been drafted in compliance with the Act on Chemical Substances and Preparations of 11 January 2001 (*Official Journal* Dziennik Ustaw 2001, No. 11, item 84), as amended.

Template for the Material Safety Data Sheet has been taken from the Regulation of the Minister of Health on Safety Data Sheets for Hazardous Substances and Preparations of 3 July 2002 (*Official Journal* Dziennik Ustaw 2002, No. 140, item 1171) as amended.

Additional regulations:

Regulation of the Minister of Economy and Labour on Limitations, Bans or Production Requirements, Turnover or Application of Hazardous Substances and Preparations, as well as Products Containing such Substances or Preparations of 5 July 2004 (*Official Journal* Dziennik Ustaw 2004, No. 168, item 1762), as amended.

Packaging labelling – as per the Regulation of the Minister of Health on Hazardous Substance and Preparation Labelling of 2 September 2003 (*Official Journal* Dziennik Ustaw 2003, No. 173, item 1679), as amended.



Irritant (Xi)

R-phrases

R 36/38 Irritating to eyes and skin

S-phrases

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S 28 After contact with skin, wash immediately with plenty of water

S 37/39 Wear suitable gloves and eye/face protection

16. Other information

List of R-phrases

R 36/38 Irritating to eyes and skin

Training required

Customers applying Rokafenol N6 should carefully read this Material Safety Data Sheet

Recommended application restrictions

Within the European Union it is forbidden to trade in or use ethoxylated nonylphenol (Rokafenol N6) and preparations that contain it in concentrations higher than or equal 0.1% by weight for:

- 1) industrial cleansing and cleaning, except for controlled closed dry cleaning equipment, where the cleaning liquid circulates in a closed-loop and afterwards is combusted and laundry devices with special equipment, where the cleaning liquid is recirculated or combusted;
- 2) home cleaning;
- 3) textile and leather treatment, except for processes that do not generate sewage and processes, where sewage is pre-treated in order to totally remove the organic fraction before the biological treatment (sheep leather degreasing);
- 4) emulsifiers in products used for hygienic care of cows' udders;
- 5) metal treatment, except for the application in controlled closed systems, where the cleaning liquid is recirculated or combusted;
- 6) production of chemical paper-pulp and paper;
- 7) cosmetic products;
- 8) other personal hygiene products, except for spermicides;
- 9) pesticide and biocide components.

Further information can be obtained from

Producer

Source of information	Reference data and European Union Risk Assessment Report 2 nd Priority List Volume: 10 – nonylphenol
Modifications in the sheet	Not applicable
Additional information	Information given herein refers solely to the technical product and ceases to be valid after its processing MSDS version: 1

Information presented herein is given based on our most contemporary knowledge and it describes the product in terms of health care, environment protection and safe handling requirements. It shall not be understood as a guarantee of specific properties of the product.