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1. Identification

Product identifier used on the label

NONANOL N

Recommended use of the chemical and restriction on use

Recommended use*: Chemical Recommended use*: Chemical

Unsuitable for use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION 100 Park Avenue Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: aliphatic alcohol

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Liq. Skin Irrit.	4 2	Flammable liquids Skin irritation

Serious eye damage Eye Dam.

Aquatic Acute Hazardous to the aquatic environment - acute

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

H227 Combustible liquid.

H318 Causes serious eye damage.

H315 Causes skin irritation. H401 Toxic to aquatic life.

Precautionary Statements (Prevention):

P280 Wear protective gloves and eye protection or face protection.

P273 Avoid release to the environment.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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 physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use water spray, dry powder, foam or carbon dioxide for

extinction.

Precautionary Statements (Storage):

P403 Store in a well-ventilated place.

Precautionary Statements (Disposal):

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Nonanol, branched and linear

CAS Number: 68515-81-1

Content (W/W): > 99.0 - <= 100.0% Synonym: No data available.

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4. First-Aid Measures

Description of first aid measures

General advice:

If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). If not breathing, give artificial respiration. First aid personnel should pay attention to their own safety.

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

If irritation develops, seek medical attention.

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Overexposure may cause:, corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: dry powder, water spray, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons: water jet

Additional information:

Use extinguishing measures to suit surroundings.

Special hazards arising from the substance or mixture

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Hazards during fire-fighting:

Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear. Special protective equipment for firefighters

Further information:

Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Ground all transfer equipment properly to prevent electrostatic discharge.

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

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8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Observe OSHA regulations (29 CFR 1910.134-139).

Hand protection:

Chemical resistant protective gloves

Eve protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

9. Physical and Chemical Properties

Form: liquid

Odour: almost odourless

alcohol-like

Odour threshold: not determined colour: colourless not applicable Melting point: colourless not applicable

Freezing point: No data available.

Boiling range: 195 - 203 °C (DIN 51751)

(1,013 mbar)

Boiling point: No data available.

Sublimation point: No applicable information available.

Flash point: 93 °C (DIN 51755, closed

cup)

Flammability: hardly combustible (derived from flash

point)

Lower explosion limit: For liquids not relevant for

classification and labelling. The lower explosion point may be 5 - 15 °C

below the flash point.

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Upper explosion limit: For liquids not relevant for

classification and labelling.

Autoignition: 275 °C (DIN 51794)

Vapour pressure: 0.03 mbar (20°C)

0.6 mbar (50°C)

Density: 0.8335 g/cm3 (DIN 53217-5)

(20°C)

approx. 0.83 Relative density: (Directive

(20°C) 92/69/EEC, A.3)

Vapour density: 4.97 (calculated)

(20°C)

Heavier than air.

Partitioning coefficient n-3.8 (Directive

octanol/water (log Pow): (26°C) 84/449/EEC, A.8)

Self-ignition not self-igniting temperature:

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

. 12.95 mPa.s (20°C)

The value was determined by calculation from the detected

kinematic viscosity.

15.54 mm2/s (DIN 51562) Viscosity, kinematic:

(20°C)

Particle size: The substance / product is marketed

or used in a non solid or granular

form.

Solubility in water: approx. 245 mg/l

(20°C)

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): organic solvents,

Molar mass: 144.26 g/mol Evaporation rate: No data available.

10. Stability and Reactivity

Viscosity, dynamic:

Reactivity

When heated can give off ignitable vapours.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing. (other)

Remarks: Forms no flammable gases in the Formation of

flammable gases: presence of water.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

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Possibility of hazardous reactions

Reacts with strong oxidizing agents.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame.

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Oral

Type of value: LD50
Species: rat (male/female)

Value: 3,950 mg/kg (OECD Guideline 401)

Inhalation

Type of value: LC50 Species: rat (no data)

Value: > 21.7 mg/l (BASF-Test)

Exposure time: 7 h An aerosol was tested. No mortality was observed.

<u>Dermal</u>

Type of value: LD50 Species: rat (male/female)

Value: > 4,000 mg/kg (OECD Guideline 402)

Assessment other acute effects

Assessment of STOT single:

not applicable

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Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes.

Skin

Species: rabbit Result: Irritant.

Method: OECD Guideline 404

<u>Eye</u>

Species: rabbit Result: Irritant.

Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Buehler test

Species: guinea pig Result: Non-sensitizing. Method: OECD Guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The chemical structure does not suggest a specific alert for such an effect.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: No data available. The chemical structure does not suggest a specific alert for such an effect.

Teratogenicity

Assessment of teratogenicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

12. Ecological Information

Toxicity

Aquatic toxicity

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Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) 11 mg/l, Cyprinus carpio (OECD 203; ISO 7346; 84/449/EWG, C.1, semistatic) The statement of the toxic effect relates to the analytically determined concentration.

Aquatic invertebrates

EC50 (48 h) 9 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants

EC50 (72 h) 11 mg/l (growth rate), Desmodesmus subspicatus (Guideline 92/69/EEC, C.3) The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to fish

No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates

No data available regarding toxicity to daphnids.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN EN ISO 10712 bacterium/EC10 (6 h): 114.5 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

79 % CO2 formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic, activated sludge, domestic)

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulative potential

Assessment bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Bioaccumulation potential

Bioconcentration factor: < 100 (14 d), Oncorhynchus mykiss (OECD Guideline 305 E)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Mobility in soil

Assessment transport between environmental compartments

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The substance will slowly evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

Additional information

Adsorbable organically-bound halogen(AOX): This product contains no organically-bound halogen.

13. Disposal considerations

Waste disposal of substance:

Do not discharge into waterways or sewer systems without proper authorization. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of container and any rinsate in an environmentally safe manner. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

WARNING: Empty containers may still contain hazardous residue. Flammable vapors may exist in containers in which residues of this product remain.

14. Transport Information

Land transport

USDOT

Classified as combustible liquid in containers greater than 119 gallons.

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

Further information

The following classification applies when exceeding 119 gallons.

Land Transport USDOT: NA 1993 COMBUSTIBLE LIQUID, N.O.S. (NONYLALCOHOL) PG III.

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

NFPA Hazard codes:

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Health: 3 Fire: 2 Reactivity: 0 Special:

HMIS III rating

Health: 3 Flammability: 2 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Acute Tox. 5 (oral) Acute toxicity

Skin Corr./Irrit. 2 Skin corrosion/irritation

Eye Dam./Irrit. 1 Serious eye damage/eye irritation

Aquatic Acute 2 Hazardous to the aquatic environment - acute

Flam. Liq. 4 Flammable liquids

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2024/03/29

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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