

SAFETY DATA SHEET

Nanten Akryyli Sealer 307

Regulation (EU) No 1907/2006, 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| | |
|------------|---|
| 1.1 | Product identifier |
| | Trade name Nanten Akryyli Sealer 307 |

| | |
|------------|---|
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against |
| | The uses of the chemical Paints and coatings, top coat. For professional use only. |

| | |
|------------|---|
| 1.3 | Details of the supplier of the Safety Data Sheet |
| | <p>Nanten Oy</p> <p>Street address Teollisuustie 6</p> <p>Postcode and post office 04300 Tuusula, Finland</p> <p>Telephone number +358 9 274 7970</p> <p>E-mail address nanten@nanten.com</p> <p>www.nanten.com</p> |

| | |
|------------|--|
| 1.4 | Emergency telephone number |
| | <p>Poison Information Centres</p> <p>Finland (Myrkytystietokeskus): 0800 147 111 or (+358) (0)9 471 977, open 24 h/d</p> <p>Estonia (Mürgistusteabekeskus): 16662 or (+372) 7943 794, www.16662.ee</p> <p>Emergency Response Centres (Europe): 112</p> |

SECTION 2: HAZARDS IDENTIFICATION

| | |
|------------|--|
| 2.1 | Classification of the substance or mixture |
| | Classification according to Regulation (EC) No 1272/2008 (CLP) |

| | |
|---|------|
| Skin corrosion/irritation – category 2 | H315 |
| Skin sensitization – category 1 | H317 |
| Specific target organ toxicity (single exposure) – category 3 | H335 |
| Chronic aquatic toxicity – category 3 | H412 |
| Flammable liquids – category 2 | H225 |

| | |
|------------|-----------------------|
| 2.2 | Label elements |
|------------|-----------------------|



Signal word: **Danger**

Hazard Statements:

H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H335 - May cause respiratory irritation
 H412 - Harmful to aquatic life with long lasting effects
 H225 - Highly flammable liquid and vapour

Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P243 - Take action to prevent static discharges
 P271 - Use only outdoors or in a well-ventilated area
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P273 - Avoid release to the environment

Contains:

Methyl methacrylate, 1,4-butanediol dimethacrylate

2.3 Other hazards

The product contains no substituents classified as as Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) compounds or substances identified as having endocrine disrupting properties.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Substances**

This product is a mixture.

3.2 Mixtures

| Substance name | CAS-, EC- or index number | REACH Registration No. | Weight-% | Classification 1272/2008/EU) |
|-----------------------------------|---|------------------------|----------|---|
| Methyl methacrylate | CAS: 80-62-6 EC: 201-297-1 Ind.: 607-035-00-6 | 01-2119452498-28 | 50 – 75 | STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317 Flam Liq. 2, H225 |
| 1,4-Butanediol dimethacrylate | CAS: 2082-81-7 EC: 218-218-1 | 01-2119967415-30 | 2.5 – 10 | Skin Sens. 1B, H317 |
| 2-(2H-Benzotriazol-2-yl)-p-cresol | CAS: 2440-22-4 EC: 219-470-5 | 01-2119583811-34 | < 1 | Skin Sens. 1, H317 Aquatic Chronic 1, H410 |

See Section 16 for full texts of the hazard statements (H phrases).

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General advice:**

Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If unconscious place in recovery position and get medical attention immediately. If not breathing, give artificial respiration.

Skin contact:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Continue rinsing for at least 10 minutes. Take off all contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical attention.

Eye contact:

Remove contact lenses. Rinse cautiously with water. Continue rinsing for at least 10 minutes. Keep eyelids open. Get medical attention.

Ingestion:

Rinse or wipe mouth with water. Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the doctor: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media: dry powder, foam, carbon dioxide (CO₂), water mist.
NOT recommended for safety reasons: strong water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions. Explosive reaction may occur on heating or burning. Burning produces irritant fumes. Flash back possible over considerable distance.

5.3 Advice for firefighters

Wear firefighter's suit conforming to standard EN469, including protective helmet, boots and gloves, and a self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. Prevent entry to sewers, surface water and ground water.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing.

Advice for emergency responders

Use personal protective equipment.

6.2 Environmental precautions

Stop leak if safe to do so. Do not allow to enter sewers, surface water or ground water.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, vermiculite). Do not use saw dust. Place in container for disposal according to local /national regulations.

Methods for cleaning up: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment.

6.4 Reference to other sections

See Section 8 for information on personal protection equipment.
See Section 13 for information on waste treatment.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid breathing dust, fume, gas, mist or vapours. Wear protective gloves and eye protection /face protection. Wash hands cautiously after handling. Keep working clothes separately.

Use only outdoors or in well-ventilated areas. Provide exhaust ventilation close to floor level. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing.

Open drum carefully as content may be under pressure. Use only in well-ventilated areas. Vapours may form explosive mixtures with air. Have fire extinguishers ready before opening the drum.

Take measures to prevent the build-up of electrostatic charge. Do not use sparking tools. Use only explosion-proof equipment. Keep away from heat, sparks, open flames and hot surfaces. No smoking. In the event of fire: use dry powder, foam, carbon dioxide (CO₂) or water mist to extinguish the fire.

Advice on good working hygiene

Ensure that eyewash stations and safety showers are close to the workstation location. Keep the work area tidy and well organized. Do not eat, drink or smoke when using the product. Due to the sensitizing properties, avoid contact of contaminated working clothes with skin. Wash hands, skin and clothing after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container. Never fill containers more than 80 % because aerial oxygen is necessary for stabilising. When draining the product, attention must be taken to prevent exposure, build-up of electrostatic charge, and formation of explosive mixtures with air.

Store container tightly closed and in upright position. Do not store the product even temporarily in unlabelled vessels. Keep in an area equipped with solvent resistant flooring.

Store in a dry, well-ventilated place, at + 5...+ 25 °C. Store away from food and beverages.

Store the product and empty containers away from sources of heat, ignition and direct sunlight. Observe the possibility of polymerisation reactions (see section 10.3). Do not store together with oxidizing and self-igniting products. Avoid contact with incompatible materials: peroxides and reactive metals, amines, heavy metal compounds, oxidizing agents, reducing agents (section 10.5).

7.3 Specific end use(s)

Recommendation: Observe instructions for use of the product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

This list is not exhaustive. Other national /international regulations may concern the monitoring of exposure to the ingredients of this product.

OEL and DNEL values given below apply to work-related exposure.

Occupational Exposure Limit Values (OELs)

OEL Finland, STM 2018:

| | TWA (8 h) | STEL (15 min) |
|---|-------------------------------|--------------------------------|
| Methyl methacrylate, CAS 80-62-6 | 42 mg/m ³ , 10 ppm | 210 mg/m ³ , 50 ppm |

TWA: Time-Weighted Average, STEL: Short-Term Exposure Limit
DNEL (Derived No Effect Level)
Methyl methacrylate, dermal: 13,7 mg/kg/d, inhalation: 210 mg/m³.

PNEC (Predicted No Effect Concentration)
No information available.

8.2 Exposure controls

Engineering controls

Ensure adequate ventilation, especially in confined areas. Provide preferably local exhaust ventilation, OR use personal respiratory protection. Provide eye wash bottles or stations at the workplace.

Eye and face protection

Wear tight chemical splash goggles. Wear face shield when appropriate. The goggles should have a CE-marking and comply with standard EN 166.

Hand protection

Wear chemical-resistant gloves complying with standard EN 374. Recommended materials: Multilayer gloves 4H /Silver Shield /Barrier, breakthrough time \geq 240 min. Gloves intended for short-term use do not provide adequate protection against acrylates.

Check during use that the gloves retain their protective properties. Breakthrough times given by manufacturers are only informative. Breakthrough times cannot be accurately estimated for mixtures of chemical substances.

Skin protection

Wear protective clothing. Antistatic clothing, at least such as EN13034/EN 13034+A1 certified clothing that provides a limited protection towards small quantities and splashes of liquid chemicals.

Respiratory protection

Wear personal respiratory protection if ventilation is insufficient to prevent exposure. Wear respiratory protection with a gas filter or an air-fed respirator. Recommended filter type: A/P2. Compliance with standard EN 529.

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|----------------------------------|
| Physical state | Liquid |
| Colour | violet |
| Odour | acrylic-like, pungent |
| Odour threshold | 0,05 ppm (methyl methacrylate) |
| Melting point /freezing point | methyl methacrylate: -48 °C |
| Initial boiling point and boiling range | methyl methacrylate: 101 °C |
| Flash point | methyl methacrylate: 12 °C |
| Evaporation rate | not available |
| Flammability (solid, gas) | not applicable |
| Lower flammability or explosive limit | 2,1 vol-% (methyl methacrylate) |
| Upper flammability or explosive limit | 12.5 vol-% (methyl methacrylate) |
| Autoignition temperature | not available |

| | |
|--|--|
| pH | not available (not soluble in water) |
| Viscosity | 70 – 90 mPa · s (25 °C, kinematic) |
| Solubility(ies) | insoluble in water |
| Partition coefficient: n-octanol/water | log P _{ow} 1,38 (methyl methacrylate) |
| Vapour pressure | 38.7 hPa (methyl methacrylate) |
| Density | 0,99 g/cm ³ (25 °C) |
| Vapour density | not available |

9.2 Other information

No information available.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

Stable when stored according to provisions. Polymerisation occurs when mixing with a catalyze (acrylic hardener) for the application as a coating.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

10.4 Conditions to avoid

Heat, flames and sparks. Exposure to sunlight.

10.5 Incompatible materials

Avoid contact with:
Radical-forming starting agents, peroxides and reactive metals
Amines
Heavy metal compound
Oxidizing agents, reducing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Product Information:

| | |
|--------------|---|
| Inhalation | Irritating to mucous membranes. May cause respiratory irritation. |
| Eye contact | No data available. |
| Skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Ingestion | No data available. |

< 1 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Substances:

| | Test/meter | Dose/concentration | Species |
|----------------------------|------------|--------------------|---------|
| Methyl methacrylate | | | |
| Oral | LC50 | > 5 000 mg/kg | Rat |
| Inhalation | LC50 | 29,8 mg/l | Rat |
| Dermal | LD50 | > 5 000 mg/kg | Rabbit |

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

No information available.

Respiratory or skin sensitisation

May cause allergic skin reaction. May cause respiratory irritation.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity – repeated exposure

No information available.

Target Organs

Eyes. Respiratory system. Skin.

Aspiration hazard

No information available.

11.2 Information on other hazards

No information available.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Harmful to aquatic life with long lasting effects

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Substances:

| | Test | Meter | Result | Exposure time |
|-------------------------------------|--------------|-------|----------------|---------------|
| Methyl methacrylate | | | | |
| Fish, <i>Oncorhynchus mykiss</i> | Static | LC50 | 79 mg/l | 96 h |
| Fish, <i>Oncorhynchus mykiss</i> | Flow-through | LC50 | 79 mg/l | 96 h |
| Fish, <i>Poecilia reticulata</i> | Static | LC50 | 326 - 427 mg/l | 96 h |
| Fish, <i>Pimephales promelas</i> | Static | LC50 | 126 - 191 mg/l | 96 h |
| Fish, <i>Pimephales promelas</i> | Flow-through | LC50 | 243 - 275 mg/l | 96 h |
| Fish, <i>Lepomis macrochirus</i> | Static | LC50 | 154 - 342 mg/l | 96 h |
| Fish, <i>Lepomis macrochirus</i> | Flow-through | LC50 | 170 -206 mg/l | 96 h |
| Invertebrates, <i>Daphnia magna</i> | Static | EC50 | 69 mg/l | 48 h |

| | |
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| 12.2 | Persistence and degradability |
| | Partially biodegradable. |
| 12.3 | Bioaccumulative potential |
| | Octanol-water partition coefficient, methyl methacrylate: log Pow 1,38. |
| 12.4 | Mobility in soil |
| | No information available. |
| 12.5 | Results of PBT and vPvB assessment |
| | No information available on the classification of substances as Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) compounds. |
| 12.6 | Endocrine disrupting properties |
| | No information available. |
| 12.7 | Other adverse effects |
| | No information available. |

SECTION 13: DISPOSAL CONSIDERATIONS

| | |
|-------------|--|
| 13.1 | Waste treatment methods |
| | Dispose of contents and container according to Waste Framework Directive (EC) N:o 98/2008, national waste and environmental regulations and local regulations. Dispose of via licenced waste management contractor. |
| | Liquid residues must be disposed of as hazardous waste. Classify and label waste containers appropriately. Use, for example, European Waste Cataloge (EWC) n:o 080111*, waste paint and varnish containing organic solvents or other hazardous substances. |
| | Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. EWC n:o 150110* - packaging containing residues of or contaminated by dangerous substances. |

SECTION 14: TRANSPORT INFORMATION

| | |
|-------------|--|
| 14.1 | UN number |
| | ADR / RID: 1866 IMDG: 1866 ICAO-TI: 1866 |
| 14.2 | UN proper shipping name |
| | ADR / RID: UN 1866 – Resin solution IMDG: UN 1866 – Resin solution ICAO-TI: UN 1866 – Resin solution |
| 14.3 | Transport hazard class(es) |
| | ADR / RID: 3 IMDG: 3 ICAO-TI: 3 |

14.4 Packing group

ADR / RID: II, tunnel restriction code D/E, hazard identification code 33, limited quantity 5 L.
IMDG: II, EmS F-E, S-E
ICAO-TI: II

14.5 Environmental hazards

IMDG marine pollutant: No.

14.6 Special precautions for user

Transport in sealed containers, in upright position and tightly fastened. Make sure that persons transporting the chemical have been trained for emergency and spillage situations.

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This product does not contain substances subject to authorisation according to REACH [(EU) N:o 1907/2006], Annex XIV.
This product does not contain restricted substances according to to REACH [(EU) N:o 1907/2006], Annex XVII.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION**Changes to previous version (1.0)**

Section 2.2: Statement EUH208 has been removed.

Full text of H-Statements referred to under section 3

H317 - May cause an allergic skin reaction
H410 - Very toxic to aquatic life with long lasting effects
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H225 - Highly flammable liquid and vapour

Training advice for workers

It is recommended that persons handling this product should have at least a basic level training on occupational risk prevention, to facilitate comprehension and interpretation of this safety data sheet.

NOTE

The information provided in this safety data sheet is correct to the best of knowledge of Nanten, or it is based on sources that are considered to be reliable. However, it is the responsibility of the user to be aware of and to take into account all other information with relevance to the safe use of this product and to take the required measures to ensure safety and compliance with current regulations in handling, storing, using and disposing of this product.