

SAFETY DATA SHEET**Nanten HM W A-osa***Regulation (EU) No 1907/2006, 2015/830***SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

1.1	Product identifier
Trade name	Nanten HM W A-osa (Component A)

1.2 Relevant identified uses of the substance or mixture and uses advised against

The uses of the chemical	Coatings. For professional use only.
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1.3 Details of the supplier of the Safety Data Sheet

	Nanten Oy
Street address	Teollisuustie 6
Postcode and post office	04300 Tuusula, Finland
Telephone number	+358 9 274 7970
E-mail address	nanten@nanten.com
	www.nanten.com

1.4 Emergency telephone number**Poison Information Centres**

Finland (Myrkytystietokeskus): 0800 147 111 or (+358) (0)9 471 977, open 24 h/d

Estonia (Mürgistusteabekeskus): 16662 or (+372) 7943 794, www.16662.ee

Sweden (Giftinformationscentralen): 010 456 6700 or +46 10 456 6700, open 24 h/d, or 112, open 24 h/d

Emergency Response Centres (Europe): 112

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.	H315
Skin Sens. 1	May cause an allergic skin reaction.	H317
Eye Dam. /Irrit. 2	Causes serious eye irritation.	H319
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.	H411

2.2 Label elements

Signal word: Warning

Hazard Statements:

H317 - May cause an allergic skin reaction.
 H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P261 - Avoid breathing dust, fume, gas, mist or vapours.
 P280 - Wear protective gloves and eye protection/face protection.
 P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P273 Avoid release to the environment.
 P501 Dispose of contents / container to a licensed waste disposal plant in accordance with all regulations.

Contains:

Bis-[4-(2,3-epoxipropoxi)phenyl]propane

Specific labelling requirements:

EUH205 — Contains epoxy constituents. May produce an allergic reaction.

2.3 Other hazards

No other information available.

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.	Concentration (weight-%)	Classification
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS: 1675-54-3 EC: 216-823-5 Ind.: 603-073-00-2	01-2119456619-26	25 - 50 %	Skin Irrit. 2, H315, Skin Sens. 1, H317, Eye Irrit. 2, H319, Aquatic Chronic 2, H411
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 Ind.: 603-103-00-4	01-2119485289-22	5 - 15 %	Skin Irrit. 2, H315, Skin Sens. 1, H317
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product	CAS: 9003-36-5 EC: 500-006-8	01-2119454392-40	5 - 15 %	Skin Irrit. 2, H315, Skin Sens. 1, H317, Aquatic Chronic 2, H411

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if the person feels unwell.

Skin contact:

IF ON SKIN: Wash with plenty of soap and water. 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:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 10 minutes. Keep eyelids open. If eye irritation continues: Get medical attention. Recommendation: Get medical attention always after eye contact and eye rinsing.

Ingestion:

Rinse mouth with water. Do not induce the person to vomit. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention, if nausea/vomiting exists, symptoms are severe, or discomfort continues.

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

Treat symptomatically.

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

Suitable extinguishing media: powder, ABC-powder.
NOT recommended for safety reasons: strong water jet.

5.2 Special hazards arising from the substance or mixture

Heating or combustion may generate reaction products that are hazardous to health and environment. Decomposition products may contain: carbon dioxide, carbon monoxide, organic compounds.

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.

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

Use personal protective equipment. Keep unprotected persons away.

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 material for containment and cleaning up

Absorb with inert material, such as sand or vermiculite. Collect the material into an appropriate container and dispose of in accordance with regulations.

6.4 Reference to other sections

See Section 1 for contact information in case of emergency.
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. Take off contaminated clothing. Wash contaminated clothing before reuse.

Persons who have become sensitized to epoxies should avoid handling this product.

7.2 Conditions for safe storage, including any incompatibilities

Store container tightly closed. Store in properly labelled containers. Do not store the product even temporarily in unlabelled vessels.

Store away from food and beverages. Store away from sources of heat and ignition.

Recommended storage temperature: +5...+30 °C. Protect from freezing.

7.3 Specific end use(s)

Recommendation: Observe instructions for use.

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, 2018: do not apply.

DNEL (Derived No Effect Level)

Reaction products of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Route of exposure	Short-term local	Short-term systemic	Long-term local	Long-term systemic
Bis-[4-(2,3-epoxipropoxy)phenyl]propane				
Inhalation	not available	12,3 mg/m ³	not available	12,3 mg/m ³
Dermal	not available	8,3 mg/kg bw/d	not available	8,3 mg/kg bw/d
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product				
Inhalation	not available	not available	not available	29,39 mg/m ³
Dermal	8,3 µg/cm ²	not available	not available	104,15 mg/kg bw/d
mg/kg bw/d = mg/kg/d = mg per kg of body weight per day				

PNEC (Predicted No Effect Concentration)

Compartment	Bis-[4-(2,3-epoxipropoxy)-phenyl]propane	Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product
Fresh water	3 µg/l	0,003 mg/l
Marine water	0,3 µg/l	0,0003 mg/l
Sewage treatment plant	10 mg/l	10 mg/l
Fresh water sediment	0,5 mg/kg dw	0,294 mg/kg dw
Marine sediment	0,5 mg/kg dw	0,0294 mg/kg dw
Soil	not available	0,237 mg/kg dw
dw = per dry weight		

8.2 Exposure controls

Engineering controls

Ensure adequate ventilation, 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.

Skin protection

It is recommended to wear chemical protective clothing, at least such as EN13034/EN 13034+A1 certified clothing that provides a limited protection towards small quantities and splashes of liquid chemicals.

Hand protection

Wear chemical-resistant gloves complying with standard EN 374. Check during use that the gloves still retain their protective properties. Break-through times given by manufacturers are only informative. Break-through times cannot be accurately estimated for mixtures of chemical substances.

Recommended materials: butyl rubber, nitrile rubber. Recommended thickness: $\geq 0,4$ mm.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on physical and chemical properties**

Appearance	Liquid/emulsion. White.
Odour	typical (not defined)
Odour threshold	0,05 ppm (mg/m ³)
pH	not available (not measured)
Melting point/freezing point	not available (not measured)
Initial boiling point and boiling range	not available (not measured)
Flash point	not available (not measured)
Evaporation rate	not available (not measured)
Flammability (solid, gas)	not available (not measured)
Upper/lower flammability or explosive limits	not available (not measured)
Vapour pressure	not available (not measured)
Vapour density	not available (not measured)
Density	1,1 g/cm ³ (20 °C)
Solubility(ies)	not available (not measured)
Partition coefficient: n-octanol/water	not available
Ignition temperature	not available
Decomposition temperature	not available
Viscosity	10.000 – 25.000 mPa * s (dynamic, 25 °C)
Explosive properties	no data available, mixture is not explosive
Oxidising properties	no data available

9.2 Other information

Content of organic solvents: ≤ 2 weight-%.

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

No further relevant information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Reacts with amines that are used as epoxy hardeners (Part B of a 2-component coating product), producing polymeric compounds. The reaction is heat-releasing (exothermic). No hazardous reactions identified when handled and stored according to provisions.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available

10.6 Hazardous decomposition products

Heating or combustion may generate reaction products that are hazardous to health and environment. Decomposition products may contain: carbon dioxide, carbon monoxide, organic compounds.

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

	Test / meter	Dose / concentration	Species
Bis-[4-(2,3-epoxipropoxi)phenyl]propane			
Oral	LD50	11.400 mg/kg	Rat
Dermal	LD50	2.000 mg/kg	Rat
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			
Oral	LD50	17.100 mg/kg	Rat
Inhalation	No mortality observed on rats exposed to saturated vapour (150 mg/m ³) for 7 h.		
Dermal	Not available.		
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product			
Oral	LD50	> 2.000 mg/kg	Rat
Inhalation	Not available.		
Dermal	LD50	> 2.000 mg/kg	Rabbit

Skin corrosion/irritation

Species: rabbit. Test: acute, OECD TG 404.			
	Result	Exposure time	Control time
Bis-[4-(2,3-epoxipropoxi)phenyl]propane			
Erythema	1,5 - 2		-
Oedema	1,0 - 1,5		
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			
Primary skin irritation index *	4,1	24 h	72 h
Primary skin irritation index	5,75	24 h	72 h
Bisfenoli F epoksihartsi			
Erythema	0,7	4 h	72 h
Oedema	0	4 h	4 - 504 h
*) Test method: EPA OTS 798.4470			

Serious eye damage/irritation

Species: rabbit. Test: acute, OECD TG 405.		
	Result	Control time
Bis-[4-(2,3-epoxipropoxy)phenyl]propane		
Acute irritation/damage	0	-
Conjunctivitis	0,7	-
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.		
Corneal haze	2	1 - 24 h
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product		
Corneal haze	0	1 – 168 h
Iris damage	0	1 – 168 h
Conjunctivitis	0	1 – 168 h
Conjunctivitis	0	1 – 168 h

Respiratory or skin sensitisation

No sufficient information available. Possible acute effect: May cause an allergic skin reaction.

Germ cell mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Specific target organ toxicity - single exposure

No information available.

Specific target organ toxicity – repeated exposure

No information available.

Aspiration hazard

No information available.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Species	Test	Meter	Result	Exposure time
Bis-[4-(2,3-epoxipropoxy)phenyl]propane				
Fish	Acute, toxicity OECD 203	LC50	1,3 mg/l	96 h
Invertebrates, <i>Daphnia magna</i> (water flea)	Acute, mobility and reproductivity OECD 202	EC50	2,1 mg/l	48 h
Invertebrates, <i>Daphnia magna</i> (water flea)	Chronic, semistatic, reproductivity OECD 211	NOEC	0,3 mg/l	21 d
Algae	Acute	-	> 11 mg/l	72 h
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.				
Fish, <i>Oncorhynchus mykiss</i> (rainbow trout)	Acute, toxicity OECD 203	LC50	> 1,8 g/l	96 h
Fish: bluegill	Acute, toxicity 203	LC50	> 5,0 g/l	96 h
Invertebrates, <i>Daphnia magna</i> (water flea)	Acute, mobility and reproductivity OECD 202	EC50	7,2 mg/l	48 h

Algae	Acute, growth inhibition OECD 201	EC50	844 mg/l	72 h
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product				
Fish	Acute	LC50	2,54 mg/l	96 h
Invertebrates, <i>Daphnia magna</i> (water flea)	Acute, mobility and reproductivity OECD 202	EC50	2,55 mg/l	48 h
Algae	Acute, growth inhibition OECD 201	EC50	> 1000 mg/l	72 h

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

	Log Pow	BCF	Bioaccumulation potential
Bis-[4-(2,3-epoxipropoxy)phenyl]propane	2,64 - 3,78	3 - 31	low
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3,77	160 - 263	low
Epoxy resin (average molecular weight ≤ 700), bisphenol-F-epichlorohydrin, reaction product	3,3	150	low
Log Pow: logarithmic octanol-water partitioning coefficient, BCF: Bioconcentration Factor			

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No sufficient data available for the classification of substances as Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) compounds.

12.6 Other adverse effects

No known significant effects or critical hazards.

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 Catalogue (EWC) n:o 08 01 11*, waste paint and varnish containing organic solvents or other hazardous substances.

Consult licenced waste management/recycling contractor on recycling and reuse of emptied containers.

SECTION 14: TRANSPORT INFORMATION**14.1 UN number**

ADR / RID: 3082
 IMDG: 3082
 ICAO / IATA: 3082

14.2 UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy derivatives)
 IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy derivatives)
 ICAO / IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy derivatives)

14.3	Transport hazard class(es)
	ADR / RID: 9 IMDG: 9 ICAO / IATA: 9
14.4	Packing group
	ADR / RID: III IMDG: III ICAO / IATA: III
14.5	Environmental hazards
	IMDG marine pollutant: Yes.
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.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
	Not applicable.

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. The content of volatile organic compounds (VOC) complies with Directive 2004/42/EC.
15.2	Chemical safety assessment
	This product contains substances for which no chemical safety assessment has been conducted.

SECTION 16: OTHER INFORMATION**Indication of changes to previous version**

Minor revisions have been made to improve the uniformity of safety instructions.

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.