

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: hsl_001 Issue date: 18/07/2023 Version: 1.0

SECTION I: Identification of the substance/mixture and of the company/undertaking

I.I. Product identifier

Product form Trade name

UFI

: Mixture
: Nano EcoLine Façade
: 05F7-941R-1E2X-FX8J
:

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

I.2.1. Relevant identified uses

Intended for general public	
Main use category	: Professional use, Consumer use
Use of the substance/mixture	: Surface impregnation for mineral, open-pored materials
Use of the substance/mixture	: Impregnation agents

I.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer <u>NanoEnzo B.V.</u> De Eenruiter 6, 3833 SB Leusden the Netherlands +31 850 07 99 00 www.nanoenzo.com

1.4. Emergency telephone number

Emergency number 112

+31 88 755 8000 (available 24/7) the National Poisons Information Center (NVIC) - Utrecht, the Netherlands, For professional healthcare providers only, to provide information in case of acute poisoning.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]				
EUH-statements	: EUH208 - Contains Tetrabutylammonium hydroxide(2052-49-5), reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)(55965-84-9), 1,2- benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one(2634-33-5). May produce an allergic reaction.			
Child-resistant fastening Tactile warning	: Not applicable : Not applicable			

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: Aqueous solution Suspension

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Siloxanes and Silicones, di-Me, [[(3- aminopropyl)silylidyne]tris(oxy)]tris	CAS-No.: 67923-10-8	1 - <10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Tetrabutylammonium hydroxide	CAS-No.: 2052-49-5 EC-No.: 218-147-6 REACH-no: 01-2120231229-61	0,01 - <0,25	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317
I,2-benzisothiazol-3(2H)-one; I,2-benzisothiazolin-3- one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	0,001 - 0,01	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5	0,0001 - 0,0005	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
I,2-benzisothiazol-3(2H)-one; I,2-benzisothiazolin-3- one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	(0.05 ≤C ≤ 100) Skin Sens. I, H317	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5	(0.0015 ≤C ≤ 100) Skin Sens. 1A, H317 (0.06 ≤C < 0.6) Skin Irrit. 2, H315 (0.06 ≤C < 0.6) Eye Irrit. 2, H319 (0.6 ≤C ≤ 100) Skin Corr. 1C, H314 (0.6 ≤C ≤ 100) Eye Dam. 1, H318	

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel			
Emergency procedures	: Ventilate spillage area.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up Other information	 Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site. 		

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includ	ing any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection:

Wear suitable gloves tested to EN374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
	Butyl rubber	6 (> 480 minutes)		3 (> 0.65)	

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical	properties		
9.1. Information on basic physical and chemical properties			
Physical state	: Liquid		
Colour	: milky white.		
Appearance	: Suspension.		
Odour	: weak.		
Odour threshold	: Not available		
Melting point	: Not applicable		
Freezing point	: Not available		
Boiling point	: Not available		
Flammability	: Non flammable.		
Explosive properties	: Product is not explosive.		
Oxidising properties	: Non oxidizing.		

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Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pН	: 6.6 – 6.9
Viscosity, kinematic	: Not available
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23 hPa
Vapour pressure at 50°C	: Not available
Density	: ≈ I g/cm³
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

The mornation of flazard classes as defined in f	
Acute toxicity (dermal) :	Not classified Not classified Not classified
reaction mass of 5-chloro-2-methyl-2H-isothiazo	I-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
LD50 oral	59 mg/kg bodyweight
LD50 dermal rat	> 1008 mg/kg bodyweight Animal: rat, Guideline: EPA OPP 81-2 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 75 mg/kg bodyweight

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LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal
	Toxicity)
kin corrosion/irritation	: Not classified pH: 6.6 – 6.9
Tetrabutylammonium hydroxide (205	2-49-5)
рН	II.25 Temp.: 29 °C Concentration: I vol%
reaction mass of 5-chloro-2-methyl-2	H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
рН	3.43 Temp.: 20 °C Concentration: 10 g/L
Serious eye damage/irritation	: Not classified pH: 6.6 – 6.9
Tetrabutylammonium hydroxide (205	2-49-5)
рН	II.25 Temp.: 29 °C Concentration: 1 vol%
reaction mass of 5-chloro-2-methyl-2	H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
pH	3.43 Temp.: 20 °C Concentration: 10 g/L
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Tetrabutylammonium hydroxide (205	2-49-5)
LOAEL (animal/female, F0/P)	600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
I,2-benzisothiazol-3(2H)-one; I,2-be	nzisothiazolin-3-one (2634-33-5)
NOAEL (animal/female, FI)	56.6 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
STOT-single exposure	: Not classified
TOT-repeated exposure	: Not classified
reaction mass of 5-chloro-2-methyl-2	H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
LOAEL (dermal, rat/rabbit, 90 days)	0.525 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EPA OPP 82-3 (Subchronic Dermal Toxicity 90 Days)

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Tetrabutylammonium hydroxide (2052-49-5)	
LC50 - Fish [I]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)

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Tetrabutylammonium hydroxide (2052-49-5)		
EC50 72h - Algae [1]	> 200 mg/l Test organisms (species): Chlorella vulgaris	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)		
LC50 - Fish [1]	0.19 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
LC50 - Fish [2]	0.28 mg/l Test organisms (species): Lepomis macrochirus	
EC50 - Crustacea [1]	0.16 mg/l Test organisms (species): Daphnia magna	
EC50 - Other aquatic organisms [1]	0.126 mg/l waterflea	
EC50 - Other aquatic organisms [2]	0.003 mg/l	
NOEC (chronic)	0.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	0.098 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '28 d'	
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)		
LC50 - Fish [1]	16.7 mg/l Test organisms (species): Cyprinodon variegatus	
LC50 - Fish [2]	2.15 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	2.94 mg/l Test organisms (species): Daphnia magna	
EC50 - Crustacea [2]	2.9 mg/l Test organisms (species): Daphnia magna	
12.2. Persistence and degradability		

No additional information available

12.3. Bioaccumulative potential

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)		
Partition coefficient n-octanol/water (Log Pow)	0.4	
12.4 Mahility in soil		

12.4. Mobility in soil

Siloxanes and Silicones, di-Me, [[(3-aminopropyl)silylidyne]tris(oxy)]tris (67923-10-8)		
Mobility in soil 21510 Source: EPISUITE v4.1		
12.5. Results of PBT and vPvB assessment		
HECOSOL® Facade protection mineral, open pore		
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII		
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
12.6. Endocrine disrupting properties		

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods European List of Waste (LoW) code	: Dispose of contents/container in accordance with licensed collector's sorting instructions. : 20 01 29* - detergents containing dangerous substances

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ADR	IMDG	ΙΑΤΑ
4.1. UN number or ID number		
Not applicable Not applicable Not applicable		Not applicable
4.2. UN proper shipping name		
Not applicable Not applicable Not applicable		Not applicable
14.3. Transport hazard class(es)		
Not applicable Not applicable		Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
4.5. Environmental hazards		
Not applicable Not applicable Not applicable		Not applicable

14.6. Special precautions for user

Overland transport Not applicable

Transport by sea Not applicable

Air transport Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information		
Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	

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Abbreviations and acronyms:	
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vРvВ	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-stat	tements:
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute I	Hazardous to the aquatic environment – Acute Hazard, Category I
Aquatic Chronic I	Hazardous to the aquatic environment – Chronic Hazard, Category I
EUH208	Contains Tetrabutylammonium hydroxide(2052-49-5), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2- methyl-2H-isothiazol-3-one (3:1)(55965-84-9), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one(2634-33-5). May produce an allergic reaction.
Eye Dam. I	Serious eye damage/eye irritation, Category I
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
Н330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Corr. IB	Skin corrosion/irritation, Category I, Sub-Category IB
Skin Corr. IC	Skin corrosion/irritation, Category I, Sub-Category IC
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. I	Skin sensitisation, Category I
Skin Sens. 1A	Skin sensitisation, category IA

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.