In accordance with Regulation no. 1907/2006 (REACH), Annex II, as amended by European Commission Regulation (EU) 2015/830 - Estonia.

CHEMICAL

SAFETY DATA SHEET

NANOTER CONCRETE

1. SECTION. Identification of the substance/mixture and of the company

1.1.Product identifier

Name of the product: NANOTER CONCRETE
Product description: thermal insulation with reinforced surface

1.2. Relevant identified uses of the substance/mixture

Usage: coating

1.3. Details of the author of the safety data sheet

Supplier:
Alternatiivenergia Agentuur OÜ
Savioja 1, Vahi 60534 Tartu vald, Tartu maakond, ESTONIA (EU)
Tel. +372 5656 7494, +372 5656 0494
Email: nanoter@aea.ee Web: www.aea.ee

Manufacturer:
Agencia de Energia Alternativa 2020 SL
Cl. Almoravides 17-25, Cinuelica R16, 03189 Orihuela Costa, Alicante, SPAIN (EU)
Web: www.aea2020.eu

1.4. Emergency telephone number

Phone number : 112 (24 h)
National Consultative Body/ Poison Center
Phone number : 911 (24 h)
Supplier or manufacturer phone nr. : +372 56560494 Mon-Fri 9-16 EE, RUS, ENG
Version : 1

2. SECTION. Hazard identification

2.1. Classification of the substance/mixture

Product definition : mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP / GHS) - see Section 3

Ingredients of unknown toxicity :0 %

Ingredients of unknown ecotoxicity :0 %

2.2.Labeling elements

Hazard pictograms: GHS07 Hazard category 4, oral and dermal, by inhalation
GHS08 health hazard
GHS09 Harmful to aquatic life

Hazard statements: H302 Harmful if swallowed
H312 Harmful in contact with skin
H315 Causes skin irritation
H332 Harmful by inhalation
H335 May cause respiratory irritation
H372 Causes damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long-lasting effects
H413 May cause long-term adverse effects in the aquatic environment

Precautionary statements

General: P102 Keep out of the reach of children.
P101 If medical advice is needed, have the product container/label at hand.
P103 Read label before use.

Prevention: P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P262 Avoid contact with eyes, skin, and clothing.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301 If swallowed, rinse mouth and seek medical advice immediately.
P304 If inhaled, go to fresh air; if breathing is difficult, call an ambulance.
P302 + P352 In case of contact with skin, wash immediately with plenty of soap and water.
P305 + P351 In case of contact with eyes, rinse immediately for several minutes gently with water.
P312 Contact Poison Center or physician if you feel unwell.

Storage: P404 Store in a closed container.
P410 Protect from sunlight.
P411 Store at +5 ºC ... +45 ºC.

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

Safety precautions: SP 1 Do not allow the product or its packaging to enter water.

Hazardous ingredients: titanium dioxide, zinc phosphate.

Annex XVII - restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and products: not applicable

2.3.Other hazards

Other hazards that are not indicated in the classification: not known.

3. SECTION. Composition/information on ingredients

3.1. Substances:

Not applicable.

3.2. Mixtures

Chemical description: a mixture consisting of a base material, fillers and binders, technological auxiliaries and pigments.

Components: according to Annex II to Regulation (EC) No 1907/2006 (point 3), the product contains:

Name of the ingredient	EC No/CAS code	%	Regulation 1272/2008 (CLP)	Notes
water-based acrylic dispersion	-	50	CLP does not classify	-
hydroxyethylcellulose	9004-60-0	<1	Acute Tox 4: H302, Acute Tox 4: H312, Skin Irrit 2: H315, Acute Tox 4: H332, STOT SE 3: H335	-
titanium dioxide	13463-67-7	<1	Acute Tox 4: H302, Acute Tox 4: H332; STOT SE 3: H372; Aquatic Chronic 4: H413	-
zinc phosphate	7779-90-0	<1	Aquatic Chronic 1: H410	-
texanol	-25265-77-4	3	not classified	-
propylene glycol	57-55-6	2	not classified	-
calcium carbonate	471-34-1	4	Skin Irrit 2: H315, STOT SE 3: H335	
sodium polymethaphosphate	10124-56-8	<1	not classified	-

C - polymerization takes place after coating.

Hazard pictograms: 

There are no ingredients which, on the basis of the information available to the manufacturer and at the concentrations used, are classified as hazardous to health or the environment, have PBT or vPvB or for which an occupational exposure limit has been established and therefore need to be addressed.

Available occupational exposure limits are listed in SECTION 8.

The notes are described according to Annex VI, 1272/2008/EC.

4. SECTION. First aid measures

4.1.Description of first aid measures.

General: always consult the family physician if in doubt and symptoms related to the use of the product persist; bring the product label or safety data sheet with you.

In case of contact with eyes: remove contact lenses, if present; wash open eyes immediately with plenty of lukewarm water for at least 15 minutes; seek medical attention immediately if symptoms occur.

On inhalation: go (by yourself or with the help of others) to fresh air;keep the victim warm and lying down; call an ambulance immediately in case of breathing difficulties; if possible, provide qualified assistance on the spot until the ambulance arrives.

In case of contact with skin: remove contaminated clothing and shoes; wash exposed areas with plenty of soap and water or skin cleanser, DO NOT use solvents and thinners; seek medical attention immediately if symptoms occur.

On swallowing: rinse mouth with plenty of water; move to fresh air and take a position that allows to breathe easily; call an ambulance immediately in case of breathing difficulties; if possible, provide qualified assistance on the spot until the ambulance arrives; DO NOT induce vomiting; even in milder cases, consult a doctor immediately.

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

may cause damage to organs through prolonged or repeated exposure;
causes skin irritation
causes eye irritation
may cause an allergic skin reaction

See SECTION 11 for more detailed information on health effects and symptoms.

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

Instructions for doctors: treat according to symptoms, consult a poison control specialist if a large amount ingested or inhaled.

Special operations: not applied.

5. SECTION. Fire-fighting measures

Class C, the product does not ignite or burn.

6. SECTION. Measures in case of accidental release

6.1.Personal precautions, protective equipment and emergency procedures:

adequate ventilation required;
avoid inhalation of mist clouds from spraying;
avoid contact with skin and eyes.

See SECTION 8 for information on appropriate personal protective equipment.

6.2.Environmental protection measures:

dangerous for the aquatic environment.
The product should not be allowed to enter sewerages or waterbodies. Inform respective authorities in case of seepage into sewerages or water bodies.

6.3.Methods and material for containment and cleaning up:

when pouring from the bowl, use a bath to prevent getting on the surface;
collect and dispose of waste according to the requirements of the country of location (see SECTION 13).

7. protective equipment. Handling and storage

The information in this section includes general tips and guidelines. SECTION 1 The list of uses must examine any available information on the specific use provided by the exposure scenario(s).

7.1.Precautions for safe handling:

when working indoors, the room must be ventilated;
wear appropriate personal protective equipment (see SECTION 8);
avoid contact with skin and eyes, avoid ingestion and inhalation;
eating, drinking, and smoking should be prohibited in areas where the product is handled, stored, and processed;
wash hands after handling the product;
prevent the product from being released into the environment.

7.2.Conditions for safe storage, including unsuitable storage conditions:

store at a temperature of +5 ^{o}C ... + 45 ºC, in a dry environment;
protect from sunlight;
the package is closed, in an upright position;
see package for shelf life.

7.3.*Specific use(s):* not applicable

8. Protective equipment. Exposure controls and personal protection

The information in this section includes general tips and guidelines. The information provided is based on the usual intended uses of the product.

8.1.Control parameters

Occupational exposure limits (Government of the Republic Regulation No 84 10.10.2019. In Annex) : not determined

Recommended monitoring procedures.

If the product contains ingredients with exposure limits, personal, workplace atmosphere, or biological monitoring may be required to determine the effectiveness of the ventilation or other control methods and /or the necessity to use respiratory protective equipment. Reference should be made to the following supervisory standards, such as: European Standard EN 689 (Workplace exposure. Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values) or European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents) A reference to the national guidance documents of the country of location on methods for the determination of dangerous substances is also required.

DNELs/DMELs : not available
PNECs : not available

8.2. Exposure controls

* Appropriate technical inspection.

Ensure adequate ventilation. If reasonably practicable, this should be achieved by local extraction and good general extraction. If they are not sufficient to keep the concentration of

particles and/or solvent vapors below the occupational exposure limit, suitable respiratory protection must be worn.

* Personal protection measures.

Hygiene measures.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working day. Appropriate techniques must be used to remove potentially contaminated clothing. Wash contaminated clothing before reuse. Ensure that eyewash bottles and emergency showers are close to the workplace.

Eye/face protection.

Use eye protection designed to protect against aerosol splashes.

*Skin protection

Hand protection.

No glove provides unlimited protection against any chemical or combination of chemicals. The breakthrough time must be longer than the end-use time of the product. The instructions provided by the glove manufacturer must be followed. Gloves should be replaced regularly and even if the glove material shows signs of damage. Always make sure that the gloves are free from defects and that they are stored and used correctly. The properties and effectiveness of gloves may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect areas of skin contact but should not be used if skin contact has already taken place.

Body protection.

Use certified work clothing that is suitable for, among other things, the environment in which the product is used.

*Respiratory protection.

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

* Environmental exposure controls.

Do not allow to enter sewages or waterbodies.

8.3. Personal protective equipment

Use chemical resistant gloves in accordance with EN 374. Recommended gloves: Viton ® or Nitrile with a minimum breakthrough time of: 480 minutes. In case of possible prolonged or repeated contact, it is recommended to use gloves of protection class 6 (breakthrough time according to EN 374 exceeds 480 minutes). For short-term expected contact only, it is recommended to use protection class 2 or higher (breakthrough time according to EN 374 greater than 30 minutes). NOTE: All relevant factors must be considered when selecting a glove for the specific application and time of use at the workplace, including: other chemicals considered, physical requirements (cut/puncture resistance, flexibility), possible user reactions to glove materials, and instructions/specifications provided by the glove supplier. The user must check that the final choice of type of glove selected for handling of the product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Appropriate footwear and additional skin protection equipment should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Harmful dust may be released when sanding the coating. Prefer wet sanding. Respiratory protection in case of particle formation (particle filter EN 143 type P2) Respiratory protection in case of spray mist (half mask with filter A2-P2 at concentrations up to 0.5% by volume).

9. Protective equipment. Physical and chemical properties

8.2.Information on basic physical and chemical properties

physical state	: homogeneous liquid mass
	white, tinted (RAL) in light tones
gloss	: semi-matt
odor	: odorless
odor threshold	: not relevant for the hazard assessment
pH	: not relevant for the hazard assessment
relative density	: 0,52-0,58 g/m^3
specific thermal conductivity λ	: 0,0012 W/m*K
viscosity (Brookfield, LV4 50rpm)	: 21,000 to 30,000 mPa*s
tack (on concrete)	: 1,1 Mpa
relative elongation	: not specified
volatile organic compounds (VOC)	: max 0,3 g/l
melting/freezing point	: not specified
boiling point/boiling range	: not specified
flash point	: not specified
flammability	: does not ignite
reflectivity	: 88 % (by different spectra 70 - 95%)
temperature resistance	: -60 ^{o}C to +150 ^{o}C (short-term 200 ^{o}C)
evaporation rate	: not specified
vapor permeability δ	: 2*10 $^{-12}$ kg/(Pa·m·s)
vapor density	: not specified
water resistance (absorbency)	: not specified
solubility	: soluble in water
decomposition temperature	: not relevant for the hazard assessment
explosiveness	: not explosive
oxidizability	: not specified

8.3. Other information

None.

9. Protective equipment. Stability and reactivity

9.1.Reactivity

Polymerization after use of the product during the drying process. After drying, there is no reactivity with chemical compounds. The properties of the product to repel biological organisms preserve.

9.2.Chemical stability

Persistent

9.3.Possibility of hazardous reactions

None.

9.4.Conditions to avoid

Temperatures below -60 ^{o}C and above +150 ^{o}C (short-term 200 ^{o}C)

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9.5.Incompatible materials

Unknown.

9.6.Hazardous decomposition products

None.

At higher temperatures above 150 ºC, water vapor is released, CO and CO_2 can be released within a certain temperature range.

10. Protective equipment. Toxicity information

The product is not toxic.

The mixture has been assessed according to EC 1272/2008 and is not classified as hazardous. See SECTIONS 2 and 3 for details.

NB! Warnings on use of the solvent

Exposure to solvent vapors in concentrations exceeding the occupational exposure limits may cause irreversible health effects such as mucosal and respiratory tract irritation, as well as irreversible effects on the kidneys, liver, and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscle weakness, drowsiness, and, in extreme cases, loss of consciousness. Upon absorption through the skin, solvents may cause some of the effects listed above. Repeated or prolonged contact with this mixture may cause defatting of the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eye, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea, and vomiting. Where known, this shall take into account delayed and immediate effects as well as chronic effects of the components from short-term and long-term oral, inhalation, and dermal exposure and eye contact.

10.1. Information on toxicological effects

Acute toxicity	: not classified
Acute poisoning	: not classified
Irritation/corrosion	: not classified
Respiratory damage	: class 4
Mutagenicity	: not classified
Carcinogenicity	: not classified
Reproductive toxicity	: not classified
Specific target organ toxicity - single exposure	: not classified
Specific target organ toxicity - repeated exposure	: not classified
Teratogenicity	: not classified
Hypersensitivity	: not classified

11. Protective equipment. Ecological information

The product should not be allowed to enter sewerages or waterbodies. Hazardous to aquatic life with long lasting effects.

The product has been assessed following the EC Regulation 1272/2008 and is classified for ecotoxicological properties. See SECTIONS 2 and 3 for details.

11.1. *Toxicity*	: not classified
11.2. *Persistence and degradability*	: not available
11.3. *Bioaccumulation*	: not available
11.4. *Mobility in soil*	: not available

11.5. Assessment of persistent, bioaccumulative, and toxic properties and of very persistent and very bioaccumulative properties

PBT : not applicable
vPvB : not applicable

12. Protective equipment. Waste management

The information in this section includes general tips and guidelines. The list of identified uses in SECTION 1 shall examine any available specific use information provided in the exposure scenario(s).

12.1. Waste treatment methods

Disposal methods: collect waste in a designated waste container, take to a hazardous waste collection point or hand over to a licensed company. Follow the laws of the country of location.

It is forbidden to pour the product into sewage or water bodies or into a place where it may enter water bodies.

Waste code	Waste designation
08 01 99	Wastes not otherwise specified in coatings

If the product is mixed with other wastes, the original waste code will not apply, and the waste organization should be contacted for further information.

Method of disposal of the package: dispose of empty containers in accordance with regulations of the country of location.

Special precautions: not relevant for the hazard assessment.

13. SECTION Transport requirements

	ADR	IMDG
UN number	unregulated	unregulated
UN proper shipping name	-	-
Transport hazard class	-	-
Packing group	-	-
Environmental hazards	No	No
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not applicable	not applicable

Special precautions for inland transport: transport in an upright position, secured and closed, ensure that the carrier is informed in advance of any action taken in the event of an accident or product spillage.

14. SECTION Regulatory legislation

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

EU Regulation (EC) No. 1907/2006 (REACH), 453/210/EC, 2015/830/EC

Annex XIV : none of the ingredients are listed

Annex XVII (Restrictions) : not applicable

Other EU legislation

VOC Directive 2004/42	: see SECTION 9
ECHA register	: see SECTION 3
Priority list of chemicals (793/93/EEC)	: compounds listed
Seveso II Directive	: not regulated
Montreal Protocol	: not listed
Stockholm Convention on Persistent Organic Pollutants	: not listed
Rotterdam Convention (PIC)	: not listed
UNECE Aarhus Protocol	: not listed
14.2. *Chemical safety assessment*	: not applicable

15. SECTION Other information

Attention for the reader!
The Safety Data Sheet is based on EU Regulation EC 1907/2006 (REACH), Annex II 830/2015. The information provided cannot be construed as a guarantee of the technical characteristics or intended use of the product.
IMPORTANT NOTE.
The information contained in this safety datasheet is not intended to be exhaustive and is based on the manufacturer's current knowledge and applicable laws. Anyone who uses the product for purposes other than those recommended in the product description without prior written confirmation of the product's suitability for the intended purpose does so at their own risk. The user is always responsible for taking all necessary measures to comply with legal and local regulations. Always read the product description and the chemical safety data sheet. All advice given by the manufacturer and all claims made by the manufacturer regarding the product (in this safety data sheet or otherwise) corresponds to reality to the best of the manufacturer's knowledge. However, the quality and condition of the substrate and many other factors that affect the use of the product do not depend on the manufacturer. Therefore, unless specifically agreed in writing, the manufacturer accepts no liability for any damage to the product or arising from its use. All products marketed by the manufacturer and technical advice provided by the manufacturer are subject to the manufacturer's standard terms of sale. You should ask for a copy of the standard terms and conditions of sale and read it carefully. The manufacturer reserves the right to change the information in this safety data sheet from time to time in the light of experience and continuous product development. Before using the product, the user must check that his/her safety data sheet is the latest version.