

Super fine liquid thermal insulation coatings of the series Bronya

Creation date	05th July 2023	Revision no.	
Revision date		Version	1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Substance / mixture

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SDSs do not have to be provided for articles. Although the SDS format may be used to convey safety information down the supply chain, it is not adapted to most articles.

1.2. Relevant identified uses of the substance or mixture and uses advised against**Mixture's intended use**

Thermal insulation coatings are used not only to prevent the escape of heat but also the cold and the formation of condensation. BRONYA thermal insulation is delivered ready for application. Immediately before application, the material must be thoroughly mixed in accordance with the instructions. The surface on which the coating is applied should be clean and degreased, free of rust and dust and should have a temperature from +10°C to +120°C. In the case of application on concrete surfaces (reinforced concrete slabs, plaster, brick, concrete blocks, etc.) before applying the insulation, it is necessary to apply acrylic base penetration, for concrete surfaces of the "concrete contact" type or similar. It is recommended to use an airless spray gun to apply the material to large areas in a production environment. Application dose of the material in one layer (layer thickness 0.5 mm) - 0.5 liters per square meter (depending on the type of surface and method of application). Wear a respirator, goggles and gloves when using a spray gun.

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet**Importer**

Name or trade name: BHT Bio Technology, SE
Address: Na Dolinách 1272/41, Praha , 140 00
Czech Republic
Identification number (CRN): 02894190
Phone: +420 777 006 745
E-mail: info@bhthydro.eu

Manufacturer

Name or trade name: BRONYA
Address: Batalyonnaya 13A, Volgograd, 400 005
Russian Federation
Phone: +7 (8442) 50-62-30, 50-62-31, 49-50-91
Web address: www.nano34.ru

Competent person responsible for the safety data sheet

Name: Ing. Emília Fintová - ENVIROTREE
E-mail: fintova@envirotree.sk

1.4. Emergency telephone number

National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Full text of all classifications and hazard statements is given in the section 16.

2.2. Label elements

none

2.3. Other hazards

not available

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SECTION 3: Composition/information on ingredients
3.2. Mixtures
Chemical characterization

The substance specified below that is not hazardous.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 66402-68-4	ceramic microspheres	80		
CAS: 9003-05-8	polyacrylamide	17		
CAS: 1762-95-4 EC: 217-175-6	Ammonium thiocyanate	1	Acute Tox. 4, H302+H312+H332 Aquatic Chronic 3, H412 EUH032	2
CAS: 7440-21-3 EC: 231-130-8	silicon	1	not classified as dangerous	1
Index: 608-067-00-3 CAS: 5146-66-7 EC: 225-918-0	3,7-dimethylocta-2,6-dienenitrile	1	Muta. 1B, H340	2

Notes

- 1 A substance for which exposure limits are set.
- 2 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures

Do not provide liquid through the mouth if the affected person is unconscious or suffers from spasm. Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Transfer the affected person to the fresh air and ensure calm environment for body and mind. In the event of issues, find medical advice.

If on skin

Wash the affected area with plenty of water, lukewarm if possible. Provide medical treatment if skin irritation persists.

If in eyes

Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Provide medical treatment, specialized if possible.

If swallowed

DO NOT INDUCE VOMITING! Provide medical treatment.

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

not available

If on skin

not available

If in eyes

not available

If swallowed

not available

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

Symptomatic treatment.

More information

Other relevant information is not available.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Not defined.

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all ignition sources; provide sufficient ventilation. Provide sufficient ventilation. Use personal protective equipment for work.

6.2. Environmental precautions

Do not allow to enter drains. In the event of substantial pollution, contact respective authorities and wastewater treatment plants.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage temperature at 0 °C.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set. Ingredientname: Limit concentration in the working zone: Formaldehyde < 0.003 mg/m³ Styrene < 0.001 mg/m³ Phenol < 0.003 mg/m³ Benzene < 0.04 mg/m³ Toluene < 0.3 mg/m³ Xylene < 0.1 mg/m³

United Kingdom

EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Substance name (component)	Type	Value	Note
silicon (CAS: 7440-21-3)	WEL 8h	10 mg/m ³	inhalable dust
	WEL 8h	4 mg/m ³	respirable dust

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not eat, drink and smoke during work.

Eye/face protection

Protective glasses with side shields. EN166 - Personal Eye Protection Standard.

Skin protection

Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant to elevated temperatures (EN ISO 374-1).

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Respiratory protection

Use a mask with anti-dust filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation (EN 14387).

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Appearance	
physical state	liquid at 20 °C
color	data not available
Odour	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
explosive limits	data not available
Vapour pressure	data not available
Solubility(ies)	
solubility in water	insoluble
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	
Kinematic viscosity	data not available
data not available	

9.2. Other information

relative vapour density	0,6
none	

SECTION 10: Stability and reactivity
10.1. Reactivity

The substance is non-flammable.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use.

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Not developed under normal uses.

SECTION 11: Toxicological information
11.1. Information on toxicological effects

No toxicological data is available for the substance.

Acute toxicity

Based on available data the classification criteria are not met.

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Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity****Acute toxicity****12.2. Persistence and degradability**

Data not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. No. 871 of 2007). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information**14.1. UN number**

not subject to transport regulations

14.2. UN proper shipping name

not relevant

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14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

No waste is generated during the production of liquid polymer heat-insulating coatings of the Bronya series. When extinguishing a fire, fog, foam, dry chemicals, carbon dioxide and other extinguishing materials can be used.

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information

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

Clean Air Act 1993 as amended. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Public health act 1961. Environmental Protection Act 1990 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

3,7-dimethylocta-2,6-dienitrile

Restriction	Conditions of restriction
29	<p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> – as substances, – as constituents of other substances, or, – in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <ul style="list-style-type: none"> – either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, – the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: <ul style="list-style-type: none"> – motor fuels which are covered by Directive 98/70/EC, – mineral oil products intended for use as fuel in mobile or fixed combustion plants, – fuels sold in closed systems (e.g. liquid gas bottles); (d) artists’ paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.

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Ammonium thiocyanate

Restriction	Conditions of restriction
65	<p>1. Shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles after 14 July 2018 unless the emission of ammonia from those mixtures or articles results in a concentration of less than 3 ppm by volume (2,12 mg/m³) under the test conditions specified in paragraph 4.</p> <p>A supplier of a cellulose insulation mixture containing inorganic ammonium salts shall inform the recipient or consumer of the maximum permissible loading rate of the cellulose insulation mixture, expressed in thickness and density.</p> <p>A downstream user of a cellulose insulation mixture containing inorganic ammonium salts shall ensure that the maximum permissible loading rate communicated by the supplier is not exceeded.</p> <p>2. By way of derogation, paragraph 1 shall not apply to placing on the market of cellulose insulation mixtures intended to be used solely for the production of cellulose insulation articles, or to the use of those mixtures in the production of cellulose insulation articles.</p> <p>3. In the case of a Member State that, on 14 July 2016, has national provisional measures in place that have been authorised by the Commission pursuant to Article 129(2)(a), the provisions of paragraphs 1 and 2 shall apply from that date.</p> <p>4. Compliance with the emission limit specified in the first subparagraph of paragraph 1 shall be demonstrated in accordance with Technical Specification CEN/TS 16516, adapted as follows:</p> <ul style="list-style-type: none"> (a) the duration of the test shall be at least 14 days instead of 28 days; (b) the ammonia gas emission shall be measured at least once per day throughout the test; (c) the emission limit shall not be reached or exceeded in any measurement taken during the test; (d) the relative humidity shall be 90 % instead of 50 %; (e) an appropriate method to measure the ammonia gas emission shall be used; (f) the loading rate, expressed in thickness and density, shall be recorded during the sampling of the cellulose insulation mixtures or articles to be tested.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H340	May cause genetic defects.
H412	Harmful to aquatic life with long lasting effects.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.

A list of additional standard phrases used in the safety data sheet

EUH032	Contact with acids liberates very toxic gas.
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Other important information about human health protection

not available

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association

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IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Muta.	Germ cell mutagenicity

Training guidelines

not available

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.