


Brinova – Bio PAintAg

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

- 1.1 Product ID:** BRinova – Bio PAint Ag
- 1.2 CAS#:** 7440-22-4
- 1.3 N^o. REACH:** No registration number is available for this substance, as the substance or its uses are exempted from registration. Annual tonnage does not require registration or this registration is due at a later date.
- 1.4 Relevant identified uses of the substance or mixture and uses advised against:**
- 1.5 Relevant uses:** Laboratory chemicals; manufacturing of substances. **Uses not recommended:** all those uses not specified in this section or in subsection 7.3.
- 1.6 Identification of the supplier of the safety data sheet:**
BRinova Bioquímica Lda.
R. Fernanda Seno, 6, Évora - Portugal
Tel.: +351 926571771
contato@brinova.eu
www.brinova.eu
- 1.7 Emergency telephone number:** 800 250 250 (CIAV-Portugal)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008
Long-term (chronic) aquatic hazard (Category 2), H411
- 2.2 Label elements:**
CLP Regulation (EC) No. 1272/2008:
Pictogram

Signal Word: None
Warnings of danger:
Toxic to aquatic life with long lasting effects.
Caution advice:
P273: Avoid release to the environment.
Other hazards:
This substance/mixture does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION / INFORMATION ON COMPONENTS

Component		Classification	Concentration
Silver			
CAS-No.	7440-22-4	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	<1 %
EC-No.	231-131-3	M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 100	

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

General Advice

Consult a physician and show this safety data sheet.

If inhaled:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact:

Wash skin with plenty of water and neutral soap. Consult a physician.

In case of eye contact:

Wash eyes with caution.

In case of ingestion:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

2. Indications about urgent medical care and special treatments needed:

Not applicable.

SECTION 5: FIREFHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide.

5.2 Special hazards arising from the substance or mixture:

Silver / silver oxides

Nature of decomposition products unknown. Not combustible.

5.3 Recommendations for fire-fighting personnel:

Wear self-contained breathing apparatus for fire fighting, if necessary.

5.4 Additional provisions:

No data available.

SECTION 6: ACCIDENTAL LEAKS MEASURES

6.1 Additional precautions, protective equipment and emergency procedures:

Avoid breathing vapors, mists or gases. Ensure adequate ventilation. For personal protection, see section 8..

6.2 Environmental precautions:

Avoid further leakage or spillage, if safe to do so. Do not allow product to enter drains. Discharge to the environment must be avoided.

6.3 Methods and materials of containment and cleaning up:

Keep in appropriate, closed containers for disposal.

6.4 Reference to other sections:

See section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe handling: see section 2.2.

Safe storage conditions, including any incompatibility: Keep container tightly closed in a dry, well-ventilated place. Opened containers should be carefully closed and kept in an upright position to avoid leakage.

7.2

A.- Technical storage manage:

Minimum temperature: 2 °C

Maximum temperature: 25 °C

Store the product at room temperature and protect from sunlight and heat. Sensitive to air and light.

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7.3 Specific final use(s):

Except for the indications already specified, it is not necessary to make any special recommendations on the uses of this product.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECCIÓN

8.1 Control parameters:

Components with workplace control parameters

Component	CAS-Nº.	Value	Control parameters	Basis
Silver	7440-22-4	TWA	0.1 mg/m ³	EH40 WEL - Workplace Exposure Limits
	Observations	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.		
		TWA	0.1 mg/m ³	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.
		Indicative		
		TWA	0.01 mg/m ³	Europe. Indicative occupational exposure limit values
		Indicative		

8.2 Exposure control

Appropriate engineering controls

Drive in accordance with good occupational health and safety practices. Wash hands before breaks and at the end of the work day.

Personal protective equipment

Eye and face protection

Wear eye protection equipment that has been tested and approved in accordance with applicable government standards, such as NIOSH (USA) or EN 106 (EU).

Skin protection

Handle with gloves. Gloves should be inspected before use. Use proper glove removal technique (without touching the outer surface) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands.

The protective gloves selected must comply with the specifications of Regulation (EU) 2016/425 and its derivative EN 374.

Body protection

Waterproof clothing. The type of protective equipment should be chosen according to the concentration and quantity of the hazardous substance in the workplace.

Respiratory protection

No respiratory protection is not required. For uncomfortable exposures, use respiratory cartridges of type OV/AG (USA) or ABEK (EU EN 1487). Use respirators and components tested and approved to appropriate government standards, such as NIOSH (US) or CEN (EU).

Environmental exposure control

Avoid further leakage or spillage, if it is safe to do so. Do not allow product to enter drains. Discharge into the environment should be avoided.

Brinova – Bio PAintAg**SECTION 9: PHYSICAL-CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

For complete information, please refer to the product data sheet.

Physical aspect: líquido

Odor: no data available

Olfactory limit: no data available

pH: no data available

Melting temperature / freezing temperature: no data available

Initial boiling temperature and boiling range: no data available

Flash point: no data available

Evaporation rate: no data available

Flammability (solid, gas): no data available

Lower/upper flammability/explosivity limits: no data available

x vapor: no data available

Vapor density: no data available

Relative density: 1.0033 g/cm³

Water solubility: no data available

Partition coefficient n-octanol/water: no data available

Auto-ignition temperature: no data available

Decomposition temperature: no data available

Viscosity: no data available

Explosive properties: no data available

Oxidizing properties: no data available

9.2 Other safety information

No data available.

Brinova – Bio PAintAg**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of dangerous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Silver/silver oxides. Hazardous decomposition products formed under fire conditions. - The nature of the decomposition products is unknown.

Other decomposition products - no data available

In case of fire: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on acute toxicological effects**

No data available.

Skin corrosion/irritation

No data available.

Severe eye injury/eye irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell Mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible and confirmed as a human carcinogen by IARC.

Reproductive Toxicity

No data available.

Organ-specific toxicity - Single exposure

No data available.

Organ-specific toxicity - Repeated exposure

No data available.

Risk of aspiration

No data available.

Additional Information

RTECS: not available.

May cause argyria (discoloration of skin and deep tissue due to deposit of insoluble silver albumin).

Brinova – Bio PAintAg**SECTION 12: ECOLOGICAL INFORMATION**

No experimental data are available on the ecotoxicological properties of the product itself.

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 R Results of PBT and VpVb

This substance/mixture does not contain components considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects:

Toxic to aquatic life with long lasting effects.

SECTION 13: DISCARD CONSIDERATIONS**13.1 Waste treatment methods.****Product**

Offer surplus and non-recyclable solutions to a licensed waste disposal company. The waste material must be disposed of in accordance with the Waste Directive 2008/98/EC, as well as local and national regulations. Leave chemicals in their original packaging. Do not mix with other waste. Handle dirty containers as if they were the product itself.

Contaminated packaging

Discard as unused product.

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SECTION 14: TRANSPORT INFORMATION

14.1 UN NUMBER

ADR/RID: 3082

IMDG: 3082

IATA: 3082

14.2 UN Official Designation of Transportation

ADR/RID: environmentally hazardous substance, Liquid, N.O.S. (Silver)

IMDG: environmentally hazardous substance, Liquid, N.O.S. (Silver)

IATA: environmentally hazardous substance, Liquid, N.O.S. (Silver)

14.3 Transport risk classes

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging groups

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: no

IATA: yes

14.6 Special precautions for the user

Other information

EHS mark (ADR 2.2.9.1.10, IMDG code 2.10.3) is required for individual and combined packages containing > 5L for liquids or > 5kg for solids.

SECTION 15: REGULATORY INFORMATION

15.1 Specific health, safety and environmental regulation/legislation for the substance or mixture

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006.

REACH - Manufacturing Restrictions: Marketing and Use of Certain Hazardous Substances, Preparations and Articles (Annex XVII)

15.2 Chemical Safety Assessment

No chemical safety assessment has been conducted for this product.

Brinova – Bio PAintAg**SECTION 16: OTHER INFORMATIONS****Texts of H-Statements referred to under sections 2 and 3:**

H400 Very toxic to aquatic organisms.
H410 Very toxic to aquatic organisms with long lasting effects.
H411 Toxic to aquatic organisms with long lasting effects.

Legislation applicable to the safety data sheet:

This Safety Data Sheet has been prepared in accordance with ANNEX II - Guide to the preparation of Safety Data Sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks:

Not applicable.

Training advice:

Minimum training in occupational risk prevention is recommended for personnel handling this product to facilitate understanding and interpretation of this safety data sheet and the product label/tag.

Main sources of literature::

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

The information contained in this Safety Data Sheet is based on sources, technical knowledge and current legislation at European and state level and cannot guarantee its accuracy. This information cannot be considered as a guarantee of product properties and is only a description of safety requirements. The methodology and working conditions of the users of this product are not under our knowledge or control and it is ultimately the responsibility of the user to take the necessary steps to obtain the legal requirements concerning the handling, storage, use and disposal of the chemicals. The information in this safety data sheet relates only to this product, which must not be used for any other purpose than that specified.