

SAFETY DATA SHEET

BXA.4291

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

BXA.4291

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

Relevant identified uses of the substance or mixture

Binder for coating

Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Vanora AG

Neulandstrasse 3

CH-6203 Sempach Station

+41 41 469 92 13

www.vanora.ch

E-mail

info@vanora.ch

Revision

17/09/2024

SDS Version

1.0

1.4. Emergency telephone number

+41 41 469 92 13 (Mo - Fr 7:30 - 17:00 MEZ/CET)

(+41 44 251 51 51 Tox Center)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP).

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.

Precautionary statement(s)

General

-
- Prevention
-
- Response
-
- Storage
-
- Disposal
-

Hazardous substances

bronopol (INN);2-bromo-2-nitropropane-1,3-diol

Additional labelling

EUH210, Safety data sheet available on request.

The product contains a biocidal product.

2.46 % of the mixture consists of ingredients of unknown toxicity.

Contains 2.46 % of components with unknown hazards to the aquatic environment

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

| Product/substance | Identifiers | % w/w | Classification | Note |
|--|--|--------|---|------|
| bronopol (INN);2-bromo-2-nitropropane-1,3-diol | CAS No.: 52-51-7 EC No.: 200-143-0 REACH: BPR Index No.: 603-085-00-8 | <0.05% | Acute Tox. 3, H301 (ATE: 193.00 mg/kg) Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Acute Tox. 3, H331 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) | |

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

-

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

None known.

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

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Fire fighters should wear appropriate personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous

earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Joint storage is permitted for products in storage classes: 2A, 2B, 3, 4.1B, 4.2, 5.1A, 5.1B, 5.2, 6.1A, 6.1B, 6.1C, 6.1D, 8A, 8B, 10, 11, 12, 13

Restrictions apply to joint storage of products in storage classes: 4.1A, 4.3, 5.1C

Joint storage is NOT allowed for products in all other storage classes.

Recommended storage material

Always store in containers of the same material as the original container.

Storage class

Storage class 12 (Non-combustible liquids).

TRGS 510 - Storage of hazardous substances in non-stationary containers.

Storage conditions

Do not freeze!

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

| Type | Class | Colour | Standards |
|--------------------------|-------|--------|-----------|
| No specific requirements | | | |

Skin protection

| Recommended | Type/Category | Standards |
|--------------------------|---------------|-----------|
| No specific requirements | - | - |

Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards |
|---|----------------------|--------------------------|-----------|
| Impermeable gloves. The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to manufacturer. | | | |

Eye protection

| Type | Standards |
|--------------------------|-----------|
| No specific requirements | - |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

White

Odour / Odour threshold

Faint

pH

~3.5

Density (g/cm³)

~1.0 (20 °C)

Kinematic viscosity

< 1000 mm²/s

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

No relevant or available data due to the nature of the product.

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No relevant or available data due to the nature of the product.

Vapour pressure

No relevant or available data due to the nature of the product.

Relative vapour density

No relevant or available data due to the nature of the product.

Decomposition temperature (°C)

No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

No relevant or available data due to the nature of the product.

Flammability (°C)

No relevant or available data due to the nature of the product.

Auto-ignition temperature (°C)

No relevant or available data due to the nature of the product.

Lower and upper explosion limit (% v/v)

No relevant or available data due to the nature of the product.

Solubility

Solubility in water

not applicable - dispersible

n-octanol/water coefficient (LogKow)

No relevant or available data due to the nature of the product.

Solubility in fat (g/L)

No relevant or available data due to the nature of the product.

9.2. Other information

Other physical and chemical parameters

Solids content approx. 43% (w/w)

Oxidizing properties

No relevant or available data due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| | |
|--------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Rat |
| Route of exposure: | Oral |
| Test: | LD50 |
| Result: | 1098 mg/kg |

| | |
|--------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Rat |
| Route of exposure: | Inhalation |
| Test: | LC50 |
| Result: | 0.82 mg/L |

| | |
|--------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Rat |
| Route of exposure: | Dermal |
| Test: | LD50 |
| Result: | >2000 mg/kg |

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 sensitisation

Based on available data, the classification criteria are not met.

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.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Fish |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 11 mg/L |

| | |
|-------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Daphnia |
| Duration: | 48 hours |
| Test: | EC50 |
| Result: | 1.08 mg/L |

| | |
|-------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Algae |
| Duration: | 72 hours |
| Test: | NOEC |
| Result: | 0.03 mg/L |

| | |
|-------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Species: | Algae |
| Duration: | 21 days |
| Test: | NOEC |
| Result: | 0.06 mg/L |

12.2. Persistence and degradability

| | |
|-------------------|--|
| Product/substance | bronopol (INN);2-bromo-2-nitropropane-1,3-diol |
| Result: | >70% |
| Conclusion: | Readily biodegradable |
| Test: | OECD 301 B |

12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

07 02 13 Waste plastic

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other informatio n: |
|------|-----------------|---------------------------------|--------------------------|-------------|---------------|---------------------------|
| ADR | - | - | - | - | - | - |
| IMDG | - | - | - | - | - | - |
| IATA | - | - | - | - | - | - |

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

WGK classification

WGK class: WGK 1

Additional information

Not applicable.

Sources

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on

classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H301, Toxic if swallowed.

H312, Harmful in contact with skin.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H331, Toxic if inhaled.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.

The safety data sheet is validated by

cob

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DE-en