

SAFETY DATA SHEET

DSV.4209

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

1.1. Product identifier

Trade name

DSV.4209

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

Relevant identified uses of the substance or mixture

Self-crosslinking binding agent for paints and lacquers

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

13/10/2022

SDS Version

1.0

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.

Safety statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

Hazardous substances

None known.

Additional labelling

Contains 3.89 % of components with unknown hazards to the aquatic environment

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

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) 2018/605.

SECTION 3: Composition/information on ingredients

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 UK-REACH: 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 (ATE: 0.588 mg/l) STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	
pyrithione zinc; (T-4)-bis[1-(hydroxy-.kappa.O)pyridine-2(1H)-thionato-.kappa.S]zinc	CAS No.: 13463-41-7 EC No.: 236-671-3 UK-REACH: Index No.: 613-333-00-7	<0.05%	Acute Tox. 3, H301 Eye Dam. 1, H318 Acute Tox. 2, H330 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)	

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

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) and continue until irritation stops.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. 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 victim 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

Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction typically takes place within an hour after exposure. The reaction results in an inflammatory reaction to the lungs.

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

None known.

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.

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

No specific requirements.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials 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

Recommended storage material

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

Storage temperature

Dry, cool and well ventilated

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

Control is unnecessary if the product is used as intended.

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

Wash hands after use.

Measures to avoid environmental exposure

No specific requirements.

8.3. Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
Respiratory protection is not needed in the event of adequate ventilation	-	-	-

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			

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
manufacturer.			

Eye protection

Type	Standards
Wear safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

White

Odour / Odour threshold

Characteristic

pH

~7.5

Density (g/cm³)

~1.0 (20 °C)

Kinematic viscosity

~400 mm²/s (20 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Ignition (°C)

Testing not relevant or not possible due to the nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Other physical and chemical parameters

No data available.

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
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1098 mg/kg
Other information	

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

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

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
 - None known.
 - Other information
 - None known.

SECTION 12: Ecological information

12.1. Toxicity

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

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

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Test method	
Species	Algae
Compartment	

Duration 72 hours
 Test NOEC
 Result 0.03 mg/L
 Other information

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

Product/substance pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
 Test method OECD 201
 Species Algae, Pseudokirchneriella subcapitata
 Compartment
 Duration 72 hours
 Test EC50
 Result 0.051 mg/L
 Other information

Product/substance pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
 Test method OECD 202
 Species Daphnia, Daphnia magna
 Compartment
 Duration 48 hours
 Test EC50
 Result 0.051 mg/L
 Other information

Product/substance pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
 Test method OECD 203
 Species Fish, Brachydanio rerio
 Compartment
 Duration 96 hours
 Test LC50
 Result 0.0104 mg/L
 Other information

Product/substance pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
 Test method OECD 211
 Species Daphnia, Daphnia magna
 Compartment
 Duration 21 days
 Test NOEC
 Result 0.0022 mg/L
 Other information

Product/substance pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc

Test method	OECD 215
Species	Fish, Brachydanio rerio
Compartment	
Duration	28 days
Test	NOEC
Result	0.00125 mg/L
Other information	

Product/substance	pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
Test method	OECD 201
Species	Algae, Pseudokirchneriella subcapitata
Compartment	
Duration	72 hours
Test	NOEC
Result	0.0149 mg/L
Other information	

12.2. Persistence and degradability

Product/substance	bronopol (INN);2-bromo-2-nitropropane-1,3-diol
Biodegradable	Yes
Test method	OECD 301 B
Result	>70%

12.3. Bioaccumulative potential

Product/substance	pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc
Test method	
Potential bioaccumulation	No data available.
LogPow	1.21
BCF	No data available.
Other information	

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is not covered by regulations on dangerous waste.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Not applicable.

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 information
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.

Additional information

Not applicable.

Sources

In accordance with Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

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.

H330, Fatal if inhaled.

H331, Toxic if inhaled.

H335, May cause respiratory irritation.

H360D, May damage the unborn child.

H372, Causes damage to organs through prolonged or repeated exposure.

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

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

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

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

In accordance with UK-REACH, a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information as required by UK-REACH.

The safety data sheet is validated by

uca

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: GB-en