SAFETY DATA SHEET

DSV.4116

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

1.1. Product identifier

Trade name

DSV.4116

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

EUH208, Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210, Safety data sheet available on request.

The product contains a biocidal product.

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
1,2-benzisothiazol-3(2H)-one	CAS No.: 2634-33-5 EC No.: 220-120-9 UK-REACH: Index No.: 613-088-00-6	<0.05%	Acute Tox. 4, H302 (ATE: 532.00 mg/kg) Skin Irrit. 2, H315 Skin Sens. 1, H317 (SCL: 0.05 %) Eye Dam. 1, H318 Acute Tox. 2, H330 (ATE: 0.40 mg/l) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	
Pyridine-2-thiol 1-oxide, sodium salt	CAS No.: 3811-73-2 EC No.: 223-296-5 UK-REACH: Index No.:	<0.01%	Acute Tox. 4, H302 (ATE: 1208.00 mg/kg) Acute Tox. 4, H312 (ATE: 1800.00 mg/kg) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 Aquatic Acute 1, H400 (M=100) 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

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT

use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 5 minutes. Seek medical assistance and continue flushing during transport.

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

This product contains substances that may trigger an allergic reaction in already sensitized persons.
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

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

Recommended storage material

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

Storage temperature

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

—

2-methylpentane-2,4-diol
Long term exposure limit (8 hours) (ppm): 25
Long term exposure limit (8 hours) (mg/m³): 123
Short term exposure limit (15 minutes) (ppm): 25
Short term exposure limit (15 minutes) (mg/m³): 123

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

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

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

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. Always wash hands, forearms and face.

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	
No special when used as intended.				

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	
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
~1700 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)

nicht entflammbar

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

Nicht anwendbar - dispergierbar

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	1,2-benzisothiazol-3(2H)-one
Test method	OECD 401
Species	Rat
Route of exposure	Oral
Test	LD50
Result	532 mg/kg
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	OECD 403
Species	Rat
Route of exposure	Inhalation

Test	LC50 (dust)
Result	0.4 mg/L
Other information	

Product/substance	Pyridine-2-thiol 1-oxide, sodium salt
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1208 mg/kg
Other information	

Product/substance	Pyridine-2-thiol 1-oxide, sodium salt
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	1800 mg/kg
Other information	

Skin corrosion/irritation

Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Rabbit
Duration	
Result	Adverse effect observed (Slightly irritating)
Other information	

Serious eye damage/irritation

Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Rabbit
Duration	
Result	Adverse effect observed (Irritating)
Other information	

Respiratory sensitisation

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

Skin sensitisation

This product contains substances that may trigger an allergic reaction in already sensitized persons.

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	2-methylpentane-2,4-diol
Test method	OECD 203
Species	Fish, Pimephales promelas
Compartment	
Duration	96 hours
Test	LC50
Result	8690 mg/L
Other information	

Product/substance	2-methylpentane-2,4-diol
Test method	OECD 202
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	5410 mg/L
Other information	

Product/substance	2-methylpentane-2,4-diol
Test method	OECD 201
Species	Algae, Pseudokirchneriella subcapitata
Compartment	
Duration	72 hours
Test	EC50
Result	>429 mg/L
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	0.74 mg/L
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	
Species	Daphnia, Daphnia magna

Compartment	
Duration	48 hours
Test	EC50
Result	1 mg/L
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	OECD 211
Species	Daphnia, Daphnia magna
Compartment	
Duration	21 days
Test	NOEC
Result	1.2 mg/L
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	OECD 215
Species	Fish, Oncorhynchus mykiss
Compartment	
Duration	28 days
Test	NOEC
Result	0.21 mg/L
Other information	

Product/substance	1,2-benzisothiazol-3(2H)-one
Test method	OECD 201
Species	Algae, Selenastrum capricornutum
Compartment	
Duration	72 hours
Test	NOEC
Result	0.04 mg/L
Other information	

Product/substance	Pyridine-2-thiol 1-oxide, sodium salt
Test method	
Species	Fish, Oncorhynchus mykiss
Compartment	
Duration	96 hours
Test	LC50
Result	0.0066 mg/L
Other information	

Product/substance	Pyridine-2-thiol 1-oxide, sodium salt
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	0.022 mg/L
Other information	

Product/substance	Pyridine-2-thiol 1-oxide, sodium salt
Test method	
Species	Algae
Compartment	
Duration	
Test	ErC50
Result	0.46 mg/L
Other information	

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. 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

H302, Harmful if swallowed.
H312, Harmful in contact with skin.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H330, Fatal if inhaled.
H332, Harmful if inhaled.
H400, Very toxic to aquatic life.
H410, Very toxic to aquatic life with long lasting effects.
H411, 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

Not applicable.

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