

SAFETY DATA SHEET

DAV.4073

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

1.1. Product identifier

Trade name

DAV.4073

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

Relevant identified uses of the substance or mixture

Additive for improving the flow properties and the water resistance

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

22/10/2025

SDS Version

4.0

Date of previous version

23/01/2025 (3.0)

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)

145 (Tox Info Suisse)

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

Not applicable.

▼ Prevention

Not applicable.

▼ Response

Not applicable.

▼ Storage

Not applicable.

▼ Disposal

Not applicable.

▼ Hazardous substances

1,2-benzisothiazol-3(2H)-one

mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

▼ Additional labelling

EUH208, Contains 1,2-benzisothiazol-3(2H)-one, mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-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 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
1,2-benzisothiazol-3(2H)-one	CAS No.: 2634-33-5 EC No.: 220-120-9 REACH: BPR Index No.: 613-088-00-6	<0.036%	Acute Tox. 4, H302 (ATE: 450.00 mg/kg) Skin Irrit. 2, H315 Skin Sens. 1A, H317 (SCL: 0.036 %) Eye Dam. 1, H318 Acute Tox. 2, H330 (ATE: 0.21 mg/L) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one	CAS No.: 55965-84-9 EC No.: REACH: BPR Index No.: 613-167-00-5	<0.0015%	EUH071 Acute Tox. 3, H301 (ATE: 65.00 mg/kg) Acute Tox. 2, H310 (ATE: 87.12 mg/kg) Skin Corr. 1C, H314 (SCL: 0.60 %) Skin Irrit. 2, H315 (SCL: 0.06 %) Skin Sens. 1A, H317 (SCL: 0.0015 %) Eye Dam. 1, H318 (SCL: 0.60 %)	

Eye Irrit. 2, H319 (SCL: 0.06 %)
Acute Tox. 2, H330 (ATE: 0.31 mg/L)
Acute Tox. 2, H330
Aquatic Acute 1, H400 (M=100)
Aquatic Chronic 1, H410 (M=100)

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

Other information

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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

In case of discomfort: bring the person into fresh air.

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

Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.

▼ Ingestion

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.
Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.
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

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Recommended storage material

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

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

sodium metabisulphite

Long term exposure limit (8 hours) (mg/m³): 5 einatembarer Staub(Gesamtstaub)

mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

Long term exposure limit (8 hours) (mg/m³): 0,2 einatembarer Staub(Gesamtstaub)
 Short term exposure limit (15 minutes) (mg/m³): 0,4 einatembarer Staub(Gesamtstaub)

Annotations:

S = Sensitizing effect.

SSC = No risk of damage to the unborn child if the occupational exposure limit (OEL) value is met.

Workplace exposure limits: MAK-/BAT values, physical effects, physical stress. (Publication number 1903.d)

DNEL

sodium metabisulphite

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	66 mg/m ³
Long term – Systemic effects - Workers	Inhalation	225 mg/m ³
Long term – Local effects - Workers	Oral	8.6 mg/kg

PNEC

sodium metabisulphite

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1 mg/L
Marine water		0.1 mg/L
Sewage treatment plant		75.4 mg/L

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 eyewash and emergency showers are clearly marked.

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.

Individual protection measures, such as personal protective equipment

Generally

Use only CE 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

~500 mm²/s (20 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

▼ Melting point/Freezing point (°C)

No data available.

Softening point/range (°C)

Does not apply to liquids.

▼ Boiling point (°C)

No data available.

▼ Vapour pressure

No data available.

▼ Relative vapour density

No data available.

▼ Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

nicht entflammbar

▼ Flammability (°C)

No data available.

▼ Auto-ignition temperature (°C)

No data available.

▼ Lower and upper explosion limit (% v/v)

No data available.

Solubility

Solubility in water

not applicable - dispersible

▼ n-octanol/water coefficient (LogKow)

No data available.

▼ Solubility in fat (g/L)

No data available.

9.2. Other information

Solids content approx. 50% by weight

Other physical and chemical parameters

No data available.

▼ Oxidizing properties

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

▼ Acute toxicity

Product/substance	sodium metabisulphite
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>1540 mg/kg

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

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

Product/substance	mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	0.31 mg/L

Product/substance	mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
Species:	Rat, male
Route of exposure:	Oral
Test:	LD50
Result:	64 mg/kg

Product/substance	mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
Species:	Rabbit, male
Route of exposure:	Dermal
Test:	LD50
Result:	87.12 mg/kg

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

▼ Skin corrosion/irritation

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

▼ Serious eye damage/irritation

Product/substance	sodium metabisulphite
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Result: Adverse effect observed (Corrosive)

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

▼ Respiratory sensitisation

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

▼ Carcinogenicity

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

▼ Reproductive toxicity

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

▼ STOT-single exposure

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

▼ STOT-repeated exposure

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

▼ Aspiration hazard

Based on available data for the mixture, 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	sodium metabisulphite
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	150-220 mg/L

Product/substance	sodium metabisulphite
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	89 mg/L

Product/substance	sodium metabisulphite
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	48 mg/L

Product/substance sodium metabisulphite
 Species: Bacteria
 Duration: 24 hours
 Test: EC50
 Result: 56 mg/L

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

Product/substance 1,2-benzisothiazol-3(2H)-one
 Species: Daphnia, Daphnia magna
 Duration: 48 hours
 Test: EC50
 Result: 1 mg/L

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

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

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

Product/substance mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 201
 Species: Algae, Pseudokirchneriella subcapitata
 Duration: 72 hours
 Test: EC50
 Result: 0.048 mg/L

Product/substance mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 202
 Species: Daphnia, Daphnia magna
 Duration: 48 hours
 Test: EC50

Result: 0.1 mg/L

Product/substance: mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 203
 Species: Fish, *Oncorhynchus mykiss*
 Duration: 96 hours
 Test: LC50
 Result: 0.22 mg/L

Product/substance: mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 211
 Species: Daphnia, *Daphnia magna*
 Duration: 21 days
 Test: NOEC
 Result: 0.004 mg/L

Product/substance: mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 210
 Species: Fish, *Oncorhynchus mykiss*
 Duration: 28 days
 Result: 0.098 mg/L

Product/substance: mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one
 Test method: OECD 201
 Species: Algae, *Pseudokirchneriella subcapitata*
 Duration: 72 hours
 Test: NOEC
 Result: 0.0012 mg/L

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

12.2. ▼ Persistence and degradability

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

12.3. ▼ Bioaccumulative potential

Based on available data for the mixture, 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.

▼ Waste description and -code

Waste plastic 07 02 13

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.

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

▼ WGK classification

WGK class: WGK 2

Additional information

Not applicable.

▼ Sources

SR 822.115.2 Ordinance of the EAER on Dangerous Working Conditions for Young People of 4 December 2007 (Status as of 1 January 2013)

SR 813.12 Ordinance on the Placing on the Market and Handling of Biocidal Products (Ordinance on Biocidal Products, OBP) of 18 May 2005 (Status as of 1 December 2018)

SR 814.610 Ordinance on the movement of wastes of 22 June 2005 (Status as of 1 January 2020)

SR 814.610.1 DETEC ordinance concerning lists for the movement of wastes of 18 October 2005 (Status as of 1 January 2018)

SR 813.11 Ordinance on Protection against Dangerous Substances and Preparations (Chemicals Ordinance, ChemO) of 5 June 2015 (Status as of 1 April 2020)

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ Full text of H-phrases as mentioned in section 3

- EUH071, Corrosive to the respiratory tract.
- H301, Toxic if swallowed.
- H302, Harmful if swallowed.
- H310, Fatal in contact with skin.
- H314, Causes severe skin burns and eye damage.
- 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.
- 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

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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: CH-en