

SAFETY DATA SHEET

Flow Enhancer

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

1.1. Product identifier

Trade name

Flow Enhancer

Product no.

128XXX008

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

Relevant identified uses of the substance or mixture

Art supplies and hobby preparations

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Daler-Rowney Ltd.

Peacock Lane Bracknell

RG12 8ST Bracknell

United Kingdom

+44 1344 461 156

www.daler-rowney.com

Contact person

Research and Development

E-mail

webmaster@daler-rowney.com

Revision

20/03/2023

SDS Version

3.0

Date of previous version

20/03/2023 (2.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. ▼ Classification of the substance or mixture

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

▼ Hazard pictogram(s)



▼ Signal word

Danger

▼ Hazard statement(s)

Causes serious eye damage. (H318)

Safety statement(s)

▼ General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

▼ **Prevention**

Wear eye protection. (P280)

▼ **Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

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

Additional labelling

Not applicable.

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

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Alcohols, C6-12, ethoxylated	CAS No.: 68439-45-2 EC No.: 614-481-5 UK-REACH: Index No.:	5-10%	Acute Tox. 4, H302 Eye Dam. 1, H318	
2-aminoethanol;ethanolamine	CAS No.: 141-43-5 EC No.: 205-483-3 UK-REACH: Index No.: 603-030-00-8	<1%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412	[1]
1,2-benzisothiazol-3(2H)-one;1,2-benzisothiazolin-3-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 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 (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

[1] European occupational exposure limit.

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) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately 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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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

IF exposed or concerned:

Get immediate medical advice/attention.

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

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. ▼ Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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

Avoid direct contact with the product.

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

Keep only in original packaging.

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

2-aminoethanol;ethanolamine

Long term exposure limit (8 hours) (ppm): 1

Long term exposure limit (8 hours) (mg/m³): 2,5

Short term exposure limit (15 minutes) (ppm): 3

Short term exposure limit (15 minutes) (mg/m³): 7,6

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

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

2-aminoethanol;ethanolamine

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	3 mg/kg bw/day
Long term – Local effects - General population	Inhalation	280 µg/m ³
Long term – Local effects - Workers	Inhalation	510 µg/m ³
Long term – Systemic effects - General population	Inhalation	180 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1 mg/m ³
Long term – Systemic effects - General population	Oral	1.5 mg/kg bw/day

PNEC

2-aminoethanol;ethanolamine

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		70 µg/L
Freshwater sediment		357 µg/kg
Intermittent release (freshwater)		28 µg/L
Marine water		7 µg/L
Marine water sediment		35.7 µg/kg
Sewage treatment plant		100 mg/L
Soil		1.29 mg/kg

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.

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

▼ **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.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA 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
No special when used as intended	-	-	-

Eye protection

Type	Standards
No special when used as intended.	-

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Transparent white

Odour / Odour threshold

Characteristic

pH

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

Density (g/cm³)

1 (20 °C)

Kinematic viscosity

50 mPa.s

Particle characteristics

Not applicable

Phase changes

Melting point/Freezing point (°C)

Not applicable

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

Does not apply to liquids.

Boiling point (°C)

Not applicable

Vapour pressure

17.48 millibar (20 °C)

Relative vapour density

Not applicable

Decomposition temperature (°C)

Not applicable

Data on fire and explosion hazards

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

Flash point (°C)

Not applicable

Flammability (°C)

Not applicable

Auto-ignition temperature (°C)

Not applicable

Lower and upper explosion limit (% v/v)

Not applicable

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient

Not applicable

Solubility in fat (g/L)

Not applicable

9.2. Other information

Evaporation rate (n-butylacetate = 100)

Not applicable

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 as retained and amended in UK law

Acute toxicity

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

Skin corrosion/irritation

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

▼ Serious eye damage/irritation

Causes serious eye damage.

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.

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

Aspiration hazard

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

11.2. Information on other hazards

▼ Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Endocrine disrupting properties

Not applicable.

Other information

None known.

SECTION 12: Ecological information

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. 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

Not applicable.

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

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

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

No special.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

▼ Sources

The Management of Health and Safety at Work Regulations 1999.

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

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H332, Harmful if inhaled.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H412, Harmful 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)

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

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**

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼ **The safety data sheet is validated by**

PH

Other

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