

SAFETY DATA SHEET

High-Tech 25L

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

1.1. Product identifier

Trade name

High-Tech 25L

Product no.

0760025010

Unique formula identifier (UFI)

RUEK-DD1X-A4D7-9D1D

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

Relevant identified uses of the substance or mixture

Metal Surface Treatment
Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

ESAB Group UK
Warlies Park House,
Horseshoe Hill,
Upshire, ESSEX.
EN9 3SL
United Kingdom
+44 (0) 1992 800875

Contact person

Product Stewardship Team

E-mail

Sustainability@esab.com

Revision

24/03/2025

SDS Version

1.0

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 112 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

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.

Precautionary statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

Hazardous substances

None known.

Additional labelling

EUH210, Safety data sheet available on request.

UFI: RUEK-DD1X-A4D7-9D1D

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
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Glycerol	CAS No.: 56-81-5 EC No.: 200-289-5 UK-REACH: Index No.:	2.5-<10%		
2-(2-butoxyethoxy)ethanol	CAS No.: 112-34-5 EC No.: 203-961-6 UK-REACH: Index No.: 603-096-00-8	1-<2.5%	Eye Irrit. 2, H319	[1], [3]

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.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

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

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.

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

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

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 conditions

No specific requirements

Incompatible materials

No specific requirements

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

Glycerol

Long term exposure limit (8 hours) (mg/m³): 10

2-(2-butoxyethoxy)ethanol

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 67,5

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

Short term exposure limit (15 minutes) (mg/m³): 101,2

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-(2-butoxyethoxy)ethanol

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	67.5 mg/m ³
Short term – Local effects - Workers	Inhalation	101.2 mg/m ³
Long term – Systemic effects - General population	Oral	6.25 mg/kg bw/day

Glycerol

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	132 mg/m ³
Long term – Local effects - Workers	Inhalation	220 mg/m ³

PNEC

2-(2-butoxyethoxy)ethanol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.1 mg/L
Freshwater sediment		4.4 mg/kg
Intermittent release (freshwater)		11 mg/L
Marine water		110 µg/L
Marine water sediment		440 µg/kg
Predators		56 mg/kg
Soil		320 µg/kg

Glycerol

Route of exposure:	Duration of Exposure:	PNEC:
Sewage treatment plant		1 g/L

8.2. Exposure controls

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

General recommendations

Wash hands before breaks and at the end of work. General ventilation.

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

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

No specific requirements

Respiratory Equipment

Use suitable respiratory protective device in case of insufficient ventilation. Filter A2/P2

Skin protection

Use protective suit (EN-13034/6). Fully skin-covering anti-static, chemical- and oil-resistant clothing and safety shoes are recommended (EN1149; EN340&EN ISO 13688; EN13034-6).

Hand protection

Wear gloves for the protection against chemicals according to EN 374. Solvent resistant gloves. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Nitrile rubber, NBR

Recommended thickness of the material: $\geq 0,5$ mm;

Penetration time of glove material: For continuous contact we recommend gloves with breakthrough time of at least 240 minutes, with the preference given to a breakthrough time greater than 480 minutes. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available.

In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made. The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection

Safety glasses

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Pink

Odour / Odour threshold

nearly odourless

pH

10,5 (20 °C)

Density (g/cm³)

~1 (20 °C)

Kinematic viscosity

No data available.

Dynamic viscosity

0 mPa.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)

100

Vapour pressure

23 hPa (20 °C)

Relative vapour density

No data available.

Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

>100

Flammability (°C)

No data available.

Auto-ignition temperature (°C)

Product is not self-igniting

Lower and upper explosion limit (% v/v)

0.9 - 5.9

Solubility

Solubility in water

Not miscible or difficult to mix.

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Organic Solvents: 9,6%

Water: 89,7%

Ignition Temperature: 400 °C

Oxidizing properties

No data available.

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

No specific requirements

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 as retained and amended in UK law

Acute toxicity

Product/substance	2-(2-butoxyethoxy)ethanol
Species:	Mouse
Route of exposure:	Oral
Test:	LD50
Result:	2410 mg/kg

Product/substance	2-(2-butoxyethoxy)ethanol
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Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	3305 mg/kg

Product/substance	2-(2-butoxyethoxy)ethanol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2764 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	2-(2-butoxyethoxy)ethanol
Species:	Rat
Test:	LC0
Result:	0.35 mg/L

Product/substance	2-(2-butoxyethoxy)ethanol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	2700 mg/L

Product/substance	2-(2-butoxyethoxy)ethanol
Test method:	OECD 202
Species:	Daphnia, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	>100 mg/L

Product/substance	2-(2-butoxyethoxy)ethanol
Test method:	OECD 203
Species:	Fish, Lepomis macrochirus
Duration:	96 hours
Test:	EC50
Result:	1300 mg/L

12.2. Persistence and degradability

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

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

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

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.

Control of Major Accident Hazards (COMAH) - Categories / dangerous substances

Not applicable.

UK-REACH, Annex XVII

2-(2-butoxyethoxy)ethanol is subject to restrictions, UK-REACH annex XVII (entry 55).

Additional information

Technical instructions (air):

Class - Water; Share in %: 75-<100;

Class - NK; Share in %: 2,5-<10;

- VOC-CH 1,61 %
- VOC-EU ~16,1 g/l
- Danish MAL Code 00-1

Sources

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

H319, Causes serious eye irritation.

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

EWG = 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

Sustainability@esab.com

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