

SAFETY DATA SHEET

In accordance with 1907/2006 Annex II (2015/830) and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name	Article number	Constituent
Devyser FH v2	8-A109-RUO	FH mix (4-A293) Start, 24 test (4-A280) Dilution buffer (4-A245) Dilution buffer, 96 test(4-A275) Index mix 2, 24 test (4-A279) Index strip A2 (4-A252) Index plate A3 (4-A253) Index buffer (4-A258) Index buffer, 96 test (4-A277)
Devyser Thalassemia	8-A106	Thal Mix (4-A278) Start, 24 test (4-A280) Dilution buffer (4-A245) Dilution buffer, 96 test (4-A275) Index Mix 2, 24 test (4-A279) Index strip A2 (4-A252) Index plate A3 (4-A253) Index buffer (4-A258) Index buffer, 96 test (4-A277)
Devyser Thalassemia	8-A106-RUO	Thal Mix (4-A278) Start, 24 test (4-A280) Dilution buffer (4-A245) Dilution buffer, 96 test (4-A275) Index Mix 2, 24 test (4-A279) Index strip A2 (4-A252) Index plate A3 (4-A253) Index buffer (4-A258) Index buffer, 96 test (4-A277)

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

Identified uses

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Producer

Company

Devyser AB
Instrumentvägen 19
SE-126 53 Hägersten
Sweden

Telephone

+46 8-562 158 50

E-mail

info@devyser.com

1.4. Emergency telephone number

Acute cases: Call 112. Request poison information.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

2.2. Label elements

Hazard pictograms	Not applicable
Signal words	Not applicable
Hazard statements	Not applicable

Supplemental hazard information

EUH210 Safety data sheet available on request.

2.3 Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Article number:		4-A280	4-A252	4-A258
Article number:		4-A245	4-A253	4-A277
Article number:		4-A275		
Constituent		Classification		Concentration
SODIUM AZIDE				
CAS nr	26628-22-8	Acute Tox 2oral, Acid Tox 1, Aquatic		< 0,1 %
EG nr	247-852-1	Acute 1, Aquatic Chronic 1; M = 1;		
Index nr	011-004-00-7	H300, EUH032, H400, H410		

Article number:		4-A293	4-A278	4-A279
Constituent		Classification		Concentration
SODIUM AZIDE				
CAS nr	26628-22-8	Acute Tox 2oral, Acid Tox 1, Aquatic		< 0,1 %
EG nr	247-852-1	Acute 1, Aquatic Chronic 1; M = 1;		
Index nr	011-004-00-7	H300, EUH032, H400, H410		
BETAINE				1 - 10 %

CAS No	107-43-7		
EC No	203-490-6		
DIMETHYL SULFOXIDE			
CAS No	67-68-5		5 %
EC No	200-664-3		

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

Never attempt to administer liquid, or anything else, to an unconscious person via the mouth.
In case of concern, or if symptoms persist, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove clothes which have been splattered.
Wash the skin with soap and water.
If symptoms occur, contact a physician.

Upon ingestion

Rinse nose, mouth and throat with water.
Drink a couple of glasses of water immediately.
Contact a doctor.

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

Upon eye contact

Transient eye irritation.

Upon ingestion

Ingestion of larger quantities of product may cause discomfort or it may impact the general health condition.

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

Symptomatic treatment.
When contacting a physician, take this SDS with you.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with materials intended for the surrounding fire.

Unsuitable extinguishing agents

Among common extinguishing agents there are none that are overtly unsuitable.

5.2. Special hazards arising from the substance or mixture

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning, and, in case of incomplete combustion, aldehydes and other toxic, harmful, irritant or environmentally harmful substances.

Note that the extinguishing water may contain toxic substances or other hazardous substances.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.

Evacuate all not-authorized personnel.

In case of fire use a respirator mask.

Wear full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.

Do not inhale vapours and avoid contact with skin, eyes and clothes when cleaning up the spillage.

Ensure good ventilation.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

Notify rescue services for larger spillage.

6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Store this product separately from food items and keep it out of the reach of children and pets.

Do not eat, drink or smoke in premises where this product is handled.

Do not inhale the fumes and avoid exposure to skin, eyes and clothing.

Handle in premises with good ventilation.

Do not mix with other products.

Take off work clothes and protective gear before meals.

Wash your hands after using the product.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

Keep out of reach for children.

Store separately from food and animal fodder, incl. utensils or surfaces which have been in contact with these things.

Store in a well-ventilated space.

Store tightly, in original packaging.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values

GLYCEROL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 10 mg/m³

SODIUM AZIDE

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.1 mg/m³

Short term exposure limit (STEL) 0.3 mg/m³

Note Sk

HYDROCHLORIC ACID ... %

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 1 ppm / 2 mg/m³

Short term exposure limit (STEL) 5 ppm / 8 mg/m³

Explanations of abbreviations are given in Section 16b

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

Wash hands thoroughly after handling and before food intake or smoking.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks.

If necessary, use gloves made of neoprene or nitrile (EN 374).

Use suitable protective clothing.

Respiratory protection

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: liquid.
b) Odour	Not indicated
c) Odour threshold	Not indicated
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	Not indicated
l) Vapour density	Not indicated
m) Relative density	Not indicated
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

Acute toxicity

The product is not classified as acute toxic, but it does contain low levels of hazardous substances.

DIMETHYL SULFOXIDE

LD50 rat 24h = 40000 mg/kg Dermal

LD50 rat 24h = 14500 mg/kg Orally

SODIUM AZIDE

LD50 rabbit 24h: 50 mg/kg Dermal

LC50 rat 4h: 0.037 mg/L Inhalation

LD50 rat 24h: 27 mg/kg Orally

Skin corrosion/irritation

No skin irritation has been detected in the event of normal use.

Serious eye damage/irritation

Eye irritation has not been proven during normal use.

Respiratory or skin sensitisation

The criteria for classification cannot be considered fulfilled based on available data.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The product is not classified as being toxic for aspiration.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

The product is not classified as an environmental hazard according to current regulations, but it does contain environmentally hazardous substances in quantities below the labelling limit.

Prevent release on land, in water and drains.

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling of the product

The product is not classified as hazardous waste.

Empty, rinsed packaging is sent for recycling where practicable.

Residual, old or contaminated product should be disposed of at a waste management facility.

Observe local regulations.

See also national waste regulations.

SECTION 14: TRANSPORT INFORMATION

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1 UN-number

Not classified as dangerous goods

14.2 UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Not indicated.

15.2. Chemical safety assessment

An assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

2017-07-24 Changes in section(s) 3, 4, 5, 6, 7, 8, 11.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Acute Tox 2oral	Acute toxicity (Category 2 oral)
Aquatic Acute 1	Very toxic to aquatic life (Category Acute 1)
Aquatic Chronic 1; M = 1	Very toxic to aquatic life with long lasting effects to aquatic environments (Category Chronic 1)

Explanations of the abbreviations in Section 8

United Kingdom

Sk	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity
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Explanations of the abbreviations in Section 14

ADR	European Agreement concerning the International Transport of Dangerous Goods by Road
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
ICAO	International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)
IATA	The International Air Transport Association

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2019-07-22.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006 Annex II	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
2015/830	COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
1272/2008	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
EH40/2005	EH40/2005 Workplace exposure limits
89/391	COUNCIL DIRECTIVE (89/391/EEC) of 12 June 1989 on the introduction of meas-

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ures to encourage improvements in the safety and health of workers at work
REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND
OF THE COUNCIL of 18 December 2006 concerning the Registration,
Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a
European Chemicals Agency, amending Directive 1999/45/EC and repealing
Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No
1488/94 as well as Council Directive 76/769/EEC and Commission Directives
91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

H300	Fatal if swallowed
EUH032	Contact with acids liberates very toxic gas
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

Other relevant information