

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

1.1. Product identifier **MP qPCR Master Mix (2x)**

Catalogue number: **E0424-01**
E0424-02
E0424-03

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

Identified uses: laboratory reagents, scientific research purposes
Uses advised against: not specified

1.3. Details of the supplier of the safety data sheet

Producer: EURxSp.zo.o
80-297Gdańsk
ul. Przyrodnikow 3
Poland

E-mail address of the person responsible for data sheet: eurx@eurx.com.pl

1.4. Emergency telephone number 112 (Emergency telephone)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

According to Reg. 1272/2008

Product is not classified as dangerous.

Human health dangers:

None.

Environmental hazards:

None.

Physic-chemical hazards:

None.

2.2. Label elements

Pictograms:

None

Signal Word:

None

Hazard Statement (H):

None.

Precautionary Statement (P):

None.

EUH210: Safety data sheet available on request.

2.3. Other hazards

The product contains no substance meet the criteria for PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Hazardous components: none

Components with Occupational Exposure Limits:

Glycerol (CAS: 56-81-5): <10%

SECTION 8

SECTION 4: First Aid measures

4.1. Description of first aid measures

Skin contact

Wash contaminated skin with soap and water, rinse thoroughly with water, in case of irritation, redness, consult your doctor.

Eye contact

Rinse with plenty water (15min). Avoid strong water jet because of the danger of damage to the cornea. Consult your doctor.

Inhalation

Move to fresh air. Consult a physician if any symptoms develop and persist.

Ingestion

Do not induce vomiting. Rinse mouth with water. Give to drink a glass of water if victim is conscious. Consult your doctor.

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

Not applicable.

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

The decision about how to proceed after the physical assessment of the victim.

SECTION 5: Fire Fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder, alcohol resistance foam. Use extinguishing methods appropriate to surrounding conditions.

Unsuitable extinguishing media: Do not use a direct water jet.

5.2. Special hazards arising from the substance or mixture

Not applicable.

5.3. Advice for firefighters

Containers in fire area cooled with water spray, if it is possible to remove the danger zone. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Do not allow fire-fighting water run-off into surface water, groundwater and sewer.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: to notify the appropriate service. Remove from the threats all person who does not participate in the removal of failure.

For emergency responders: Ensure adequate ventilation.

6.2. Environmental Precautions

Do not discharge into the drains/surface water/groundwater.

6.3. Methods and material for containment and cleaning up

Prevent spreading. Remove with inert absorbent (e.g. sand or vermiculite), and place in a close containers and hold for waste disposal.

6.4. Reference to other sections

Disposal considerations – see section 13.

Personal precautions – see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Work in accordance with the principles of safety and hygiene: Do not eat, drink and smoke at work, wash your hands after use, remove contaminated clothing and protective equipment before entering places for meals.

7.2. Conditions for safe storage, including any incompatibilities

The product stored in a cool, dry, well ventilated room, in the tightly closed container. Protect from direct sunlight.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits: Glycerol (CAS: 56-81-5): <50%

Country	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m ³	ppm	mg/m ³
Australia	-	10 (1)	-	mg/m ³
Belgium	-	10	-	-
Canada - Ontario	-	10	-	-
Canada - Québec	-	10	-	-
Finland	-	20	-	-
France	-	10	-	-
Germany (AGS)	-	200 (1)	-	-
Germany (DFG)	-	200 (1)	-	400 (1)(2)
Ireland	-	10	-	400 (1)(2)
Malaysia	-	10 TWA mist	-	-
New Zealand	-	10 (1)	-	-
Poland	-	10	-	-
Singapore	-	10	-	-
South Korea	-	10	-	-
Spain	-	10	-	-
Switzerland	-	50 inhalable aerosol	-	-
USA - OSHA	-	15 inhalable dust	-	100 inhalable aerosol
	-	5 respirable dust	-	-
United Kingdom	-	10	-	-

Remarks	
Australia	(1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Germany (AGS)	1) Inhalable fraction (2) 15 minutes average value

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Germany (DFG)	1) Inhalable fraction (2) 15 minutes average value
New Zealand	1) The value for inhalable dust containing no asbestos and less than 1% free silica.
Malaysia	TWA- time weighted average, eight (8) hours unless otherwise specified

8.2. Exposure controls

Appropriate engineering controls: Use in well-ventilated rooms.

Individual protection measures, such as personal protective equipment:



Eye / face protection:

Use goggles or a protective face mask (according to EN 166).

Skin protection

Hand protection:

It is recommended to use protective gloves resistant to chemicals in accordance with EN-PN 374:2005.

Recommended materials: Nitrile rubber (thickness > 0.11mm, penetration time > 480min.).

The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer.

Other:

Protective clothing.

Respiratory protection:

Avoid breathing vapors. If there is a risk of exposure to concentrated vapors, use a mask with organic vapor filter (according to EN 143).

Thermal hazards:

Not applicable.

Environmental exposure controls:

Not allowed to spread in the environment and run-off into drains and watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Not applicable
Odour	Not applicable
Odour threshold	Not applicable
pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not applicable

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Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	App. 1g/cm ³
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Solubility(ies)	Not applicable
Decomposition temperature	Not applicable
Viscosity;	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

None.

10.2. Chemical stability

Under normal circumstances the product is stable.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Direct sunlight, hot surfaces and open flames.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Emits toxic fumes under fire conditions: carbon monoxide, nitrogen oxides, hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- (a) acute toxicity: Based on the available data, the classification criteria are not met
- (b) skin corrosion/irritation: Based on the available data, the classification criteria are not met
- (c) serious eye damage/irritation: Based on the available data, the classification criteria are not met
- (d) respiratory or skin sensitisation: Based on the available data, the classification criteria are not met
- (e) germ cell mutagenicity: Based on the available data, the classification criteria are not met
- (f) carcinogenicity: Based on the available data, the classification criteria are not met
- (g) reproductive toxicity: Based on the available data, the classification criteria are not met
- (h) STOT-single exposure: Based on the available data, the classification criteria are not met
- (i) STOT-repeated exposure: Based on the available data, the classification criteria are not met
- (j) aspiration hazard: Based on the available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as dangerous to the environment.

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

The product contains no substance meet the criteria for PBT or vPvB.

12.6. Other adverse effects

Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste: The code must be given individually depending on industry and location of use.

Packaging: Dispose of product waste in accordance with local regulations. The packaging is recyclable

EU REGULATIONS

Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

SECTION 14: Transport information

ADR/RID/IMDG/ICAO:

14.1. UN number

not classified as dangerous

14.2. UN proper shipping name

not classified as dangerous

14.3. Transport hazard class(es)

not classified as dangerous

14.4. Packing group

not classified as dangerous

14.5. Environmental hazards

not classified as dangerous

14.6. Special precautions for user

not classified as dangerous

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

not classified as dangerous

SECTION 15: Regulatory information

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

EU REGULATIONS:

1. 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.
2. 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)

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3. 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 (Text with EEA relevance).
4. Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

15.2. Chemical safety assessment

No chemical safety assessments for the mixture.

SECTION 16: Other information

Abbreviations and acronyms, list of relevant hazard statements used in the safety data sheet:

PBT – Persistent, Bioaccumulative and Toxic
vPvB – very Persistent and very Bioaccumulative
ADR – International Carriage of Dangerous Goods by Road
RID – International Carriage of Dangerous Goods by Rail
IMDG – International Maritime Dangerous Goods
ICAO – Safe Transport of Dangerous Goods by Air

Method of classification: Product is not classified as dangerous.

Training: Not required.

Key literature:

Annex to Regulation (EU) 2015/830.
 Current legislation (Section 15).
 Information Agency for Chemical Substances.

The information in this MSDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this MSDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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

1.1. Product identifier **Water nuclease free**

Catalogue number -

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

Identified uses: laboratory reagents, scientific research purposes

Uses advised against: Not for food, drug or household use

1.3. Details of the supplier of the safety data sheet

Producer: EURxSp.zo.o
80-297Gdańsk
ul. Przyrodnikow 3
Poland

E-mail address of the person responsible for data sheet: eurx@eurx.com.pl

1.4. Emergency telephone number 112 (Emergency telephone)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

According to Reg. 1272/2008

Product is not classified as dangerous.

Human health dangers:

None.

Environmental hazards:

None.

Physic-chemical hazards:

None.

2.2. Label elements

Pictograms:

None

Signal Word:

None

Hazard Statement (H):

None.

Precautionary Statement (P):

None.

2.3. Other hazards

The product contains no substance meet the criteria for PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Water (

Formula: H₂O

Mass: 18.01530

CAS-No:7732-18-5

3.2. Mixtures

Hazardous components: none

SECTION 4: First Aid measures

4.1. Description of first aid measures

Skin contact

Wash contaminated skin with soap and water, rinse thoroughly with water, in case of irritation, redness, consult your doctor.

Eye contact

Rinse with plenty water (15min). Avoid strong water jet because of the danger of damage to the cornea. Consult your doctor.

Inhalation

Move to fresh air. Consult a physician if any symptoms develop and persist.

Ingestion

Do not induce vomiting. Rinse mouth with water. Give to drink a glass of water if victim is conscious. Consult your doctor.

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

Not applicable.

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

The decision about how to proceed after the physical assessment of the victim.

SECTION 5: Fire Fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder, alcohol resistance foam. Use extinguishing methods appropriate to surrounding conditions.

Unsuitable extinguishing media: Do not use a direct water jet.

5.2. Special hazards arising from the substance or mixture

Not applicable.

5.3. Advice for firefighters

Containers in fire area cooled with water spray, if it is possible to remove the danger zone. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Do not allow fire-fighting water run-off into surface water, groundwater and sewer.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: to notify the appropriate service. Remove from the threats all person who does not participate in the removal of failure.

For emergency responders: Ensure adequate ventilation.

6.2. Environmental Precautions

Do not discharge into the drains/surface water/groundwater.

6.3. Methods and material for containment and cleaning up

Prevent spreading. Remove with inert absorbent (e.g. sand or vermiculite), and place in a close containers and hold for waste disposal.

6.4. Reference to other sections

Disposal considerations – see section 13.

Personal precautions – see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Work in accordance with the principles of safety and hygiene: Do not eat, drink and smoke at work, wash your hands after use, remove contaminated clothing and protective equipment before entering places for meals.

7.2. Conditions for safe storage, including any incompatibilities

The product stored in a cool, dry, well ventilated room, in the tightly closed container. Protect from direct sunlight.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits: none

8.2. Exposure controls

Appropriate engineering controls: Use in well-ventilated rooms.

Individual protection measures, such as personal protective equipment:



Eye / face protection:

Use goggles or a protective face mask (according to EN 166).

Skin protection

Hand protection:

It is recommended to use protective gloves resistant to chemicals in accordance with EN-PN 374:2005.

Recommended materials: Nitrile rubber (thickness > 0.11mm, penetration time > 480min.).

The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer.

Other:

Protective clothing.

Respiratory protection:

Avoid breathing vapors. If there is a risk of exposure to concentrated vapors, use a mask with organic vapor filter (according to EN 143).

Thermal hazards:

Not applicable.

Environmental exposure controls:

Not allowed to spread in the environment and run-off into drains and watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Not applicable
Odour	Not applicable
Odour threshold	Not applicable

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pH	Not applicable
Melting point/freezing point	0 °C
Initial boiling point and boiling range	100 °C
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	17.535 mm Hg
Vapour density	92.51 mm Hg
Relative density	App. 1g/cm ³
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Solubility(ies)	Soluble in acetic acid. Soluble in acetone. Soluble in ammonia. Soluble in ammonium chloride. Soluble in ethanol. Soluble in glycerol. Soluble in hydrochloric acid. Soluble in methanol. Soluble in nitric acid. Soluble in sulfuric acid. Soluble in sodium hydroxide solution. Soluble in propylene glycol
Decomposition temperature	Not applicable
Viscosity;	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

None.

10.2. Chemical stability

Under normal circumstances the product is stable.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Direct sunlight, hot surfaces and open flames.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Emits toxic fumes under fire conditions: carbon monoxide, nitrogen oxides, hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- (a) acute toxicity: Based on the available data, the classification criteria are not met
- (b) skin corrosion/irritation: Based on the available data, the classification criteria are not met
- (c) serious eye damage/irritation: Based on the available data, the classification criteria are not met
- (d) respiratory or skin sensitisation: Based on the available data, the classification criteria are not met
- (e) germ cell mutagenicity: Based on the available data, the classification criteria are not met
- (f) carcinogenicity: Based on the available data, the classification criteria are not met
- (g) reproductive toxicity: Based on the available data, the classification criteria are not met
- (h) STOT-single exposure: Based on the available data, the classification criteria are not met
- (i) STOT-repeated exposure: Based on the available data, the classification criteria are not met
- (j) aspiration hazard: Based on the available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as dangerous to the environment.

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

The product contains no substance meet the criteria for PBT or vPvB.

12.6. Other adverse effects

Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste: The code must be given individually depending on industry and location of use.

Packaging: Dispose of product waste in accordance with local regulations. The packaging is recyclable

EU REGULATIONS

Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

SECTION 14: Transport information

ADR/RID/IMDG/ICAO:

14.1. UN number

not classified as dangerous

14.2. UN proper shipping name

not classified as dangerous

14.3. Transport hazard class(es)

not classified as dangerous

14.4. Packing group

not classified as dangerous

14.5. Environmental hazards

not classified as dangerous

14.6. Special precautions for user

not classified as dangerous

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

not classified as dangerous

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SECTION 15: Regulatory information

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

EU REGULATIONS:

1. 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.
2. 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)
3. 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 (Text with EEA relevance).
4. Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

15.2. Chemical safety assessment

No chemical safety assessments for the mixture.

SECTION 16: Other information

Abbreviations and acronyms, list of relevant hazard statements used in the safety data sheet:

PBT – Persistent, Bioaccumulative and Toxic
vPvB – very Persistent and very Bioaccumulative
ADR – International Carriage of Dangerous Goods by Road
RID – International Carriage of Dangerous Goods by Rail
IMDG – International Maritime Dangerous Goods
ICAO – Safe Transport of Dangerous Goods by Air

Method of classification: Product is not classified as dangerous.

Training: Not required.

Key literature:

Annex to Regulation (EU) 2015/830.
 Current legislation (Section 15).
 Information Agency for Chemical Substances.

The information in this MSDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this MSDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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

1.1. Product identifier **Uracil-N-glycosylase (UNG)**

Catalogue number: E1250-01
E1250-02

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

Identified uses: laboratory reagents, scientific research purposes
Uses advised against: not specified

1.3. Details of the supplier of the safety data sheet

Producer: EURxSp.oz.o
80-297Gdańsk
ul. Przyrodnikow 3
Poland

E-mail address of the person responsible for data sheet: eurx@eurx.com.pl

1.4. Emergency telephone number 112 (Emergency telephone)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

According to Reg. 1272/2008

Product is not classified as dangerous.

Human health dangers:

None.

Environmental hazards:

None.

Physic-chemical hazards:

None.

2.2. Label elements

Pictograms:

None

Signal Word:

None

Hazard Statement (H):

None.

Precautionary Statement (P):

None.

EUH210: Safety data sheet available on request

2.3. Other hazards

The product contains no substance meet the criteria for PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Hazardous components: Not applicable.

SAFETY DATA SHEET <i>according to: 1907/2006 z– REACH and 2015/830</i>		
Uracil-N-glycosylase (UNG)	Version EN : 2.0	Issue: 26.10.2019

For full text of H-statements: see SECTION 16

Components with Occupational Exposure Limits:

Glycerol (CAS: 56-81-5): <50%

See SECTION 8

SECTION 4: First Aid measures

4.1. Description of first aid measures

Skin contact

Wash contaminated skin with soap and water, rinse thoroughly with water, in case of irritation, redness, consult your doctor.

Eye contact

Rinse with plenty water (15min). Avoid strong water jet because of the danger of damage to the cornea. Consult your doctor.

Inhalation

Move to fresh air. Consult a physician if any symptoms develop and persist.

Ingestion

Do not induce vomiting. Rinse mouth with water. Give to drink a glass of water if victim is conscious Consult your doctor.

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

Not applicable.

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

The decision about how to proceed after the physical assessment of the victim.

SECTION 5: Fire Fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder, alcohol resistance foam. Use extinguishing methods appropriate to surrounding conditions.

Unsuitable extinguishing media: Do not use a direct water jet.

5.2. Special hazards arising from the substance or mixture

Not applicable.

5.3. Advice for firefighters

Containers in fire area cooled with water spray, if it is possible to remove the danger zone. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Do not allow fire-fighting water run-off into surface water, groundwater and sewer.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: to notify the appropriate service. Remove from the threats all person who does not participate in the removal of failure.

For emergency responders: Ensure adequate ventilation.

6.2. Environmental Precautions

Do not discharge into the drains/surface water/groundwater.

6.3. Methods and material for containment and cleaning up

Prevent spreading. Remove with inert absorbent (e.g. sand or vermiculite), and place in a close containers and hold for waste disposal.

6.4. Reference to other sections

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Disposal considerations – see section 13.

Personal precautions – see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Work in accordance with the principles of safety and hygiene: Do not eat, drink and smoke at work, wash your hands after use, remove contaminated clothing and protective equipment before entering places for meals.

7.2. Conditions for safe storage, including any incompatibilities

The product stored in a cool, dry, well ventilated room, in the tightly closed container. Protect from direct sunlight.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits: Glycerol (CAS: 56-81-5): <50%

Country	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m ³	ppm	mg/m ³
Australia	-	10 (1)	-	mg/m ³
Belgium	-	10	-	-
Canada - Ontario	-	10	-	-
Canada - Québec	-	10	-	-
Finland	-	20	-	-
France	-	10	-	-
Germany (AGS)	-	200 (1)	-	-
Germany (DFG)	-	200 (1)	-	400 (1)(2)
Ireland	-	10	-	400 (1)(2)
New Zealand	-	10 (1)	-	-
Poland	-	10	-	-
Singapore	-	10	-	-
South Korea	-	10	-	-
Spain	-	10	-	-
Switzerland	-	50 inhalable aerosol	-	-
USA - OSHA	-	15 inhalable dust	-	100 inhalable aerosol
	-	5 respirable dust	-	-
United Kingdom	-	10	-	-

Remarks

Australia	(1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Germany (AGS)	1) Inhalable fraction (2) 15 minutes average value
Germany (DFG)	1) Inhalable fraction (2) 15 minutes average value

New Zealand

1) The value for inhalable dust containing no asbestos and less than 1% free silica.

From : <https://limitvalue.ifa.dguv.de>

8.2. Exposure controls

Appropriate engineering controls: Use in well-ventilated rooms.

Individual protection measures, such as personal protective equipment:



Eye / face protection:

Not applicable.

Skin protection

Hand protection:

It is recommended to use protective gloves resistant to chemicals in accordance with EN-PN 374:2005.

Recommended materials: Nitrile rubber (thickness > 0.11mm, penetration time > 480min.).

The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer.

Other:

Protective clothing.

Respiratory protection:

Avoid breathing vapors. If there is a risk of exposure to concentrated vapors, use a mask with organic vapor filter (according to EN 143).

Thermal hazards:

Not applicable.

Environmental exposure controls:

Not allowed to spread in the environment and run-off into drains and watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Not applicable
Odour	Not applicable
Odour threshold	Not applicable
pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not applicable
Upper/lower flammability or explosive limits	Not applicable

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Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	App. 1g/cm ³
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Solubility(ies)	Not applicable
Decomposition temperature	Not applicable
Viscosity;	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

None.

10.2. Chemical stability

Under normal circumstances the product is stable.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Direct sunlight, hot surfaces and open flames.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Emits toxic fumes under fire conditions: carbon monoxide, nitrogen oxides, hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- (a) acute toxicity: Based on the available data, the classification criteria are not met
- (b) skin corrosion/irritation: Based on the available data, the classification criteria are not met
- (c) serious eye damage/irritation: Based on the available data, the classification criteria are not met
- (d) respiratory or skin sensitisation: Based on the available data, the classification criteria are not met
- (e) germ cell mutagenicity: Based on the available data, the classification criteria are not met
- (f) carcinogenicity: Based on the available data, the classification criteria are not met
- (g) reproductive toxicity: Based on the available data, the classification criteria are not met
- (h) STOT-single exposure: Based on the available data, the classification criteria are not met
- (i) STOT-repeated exposure: Based on the available data, the classification criteria are not met
- (j) aspiration hazard: Based on the available data, the classification criteria are not met

Glycerol

INHALATION Exposure	Threshold	Most sensitive study
Long-term:	(DNEL) 33 mg/m ³	irritation (respiratory tract)
Acute /short term:	-	-

SAFETY DATA SHEET <i>according to: 1907/2006 z- REACH and 2015/830</i>		
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ORAL Exposure	Threshold	Most sensitive study
Long-term:	(DNEL) 229 mg/kg bw/day	repeated dose toxicity

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

The product contains no substance meet the criteria for PBT or vPvB.

12.6. Other adverse effects

Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste: The code must be given individually depending on industry and location of use.

Packaging: Dispose of product waste in accordance with local regulations. The packaging is recyclable

EU REGULATIONS

Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

SECTION 14: Transport information

ADR/RID/IMDG/ICAO:

14.1. UN number

not classified as dangerous

14.2. UN proper shipping name

not classified as dangerous

14.3. Transport hazard class(es)

not classified as dangerous

14.4. Packing group

not classified as dangerous

14.5. Environmental hazards

not classified as dangerous

14.6. Special precautions for user

not classified as dangerous

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

not classified as dangerous

SECTION 15: Regulatory information

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

EU REGULATIONS:

1. 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.

SAFETY DATA SHEET <i>according to: 1907/2006 z– REACH and 2015/830</i>		
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2. 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)
3. 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 (Text with EEA relevance).
4. Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives

15.2. Chemical safety assessment

No chemical safety assessments for the mixture.

SECTION 16: Other information

Abbreviations and acronyms, list of relevant hazard statements used in the safety data sheet:

PBT – Persistent, Bioaccumulative and Toxic

vPvB – very Persistent and very Bioaccumulative

ADR – International Carriage of Dangerous Goods by Road

RID – International Carriage of Dangerous Goods by Rail

IMDG – International Maritime Dangerous Goods

ICAO – Safe Transport of Dangerous Goods by Air

DNEL– Derived No-Effect Level is defined as the level of chemical exposure above which humans should not be exposed.

Method of classification: Product is not classified as dangerous.

Training: Not required.

Key literature:

Annex to Regulation (EU) 2015/830.

Current legislation (Section 15).

Information Agency for Chemical Substances.

The information in this MSDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this MSDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.