

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

1.1. Product Identifier

Product Form : Mixture
Product Name : IMCSzyme® RT
Product Code : 04-RT
Synonyms : Genetically modified Beta-glucuronidase; CAS No. 9001-45-0; Enzyme Commission No. 3.2.1.31

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture : Liquid chromatography. Laboratory and research use only.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

Company

Integrated Micro-Chromatography Systems

110 Centrum Drive

Irmo, SC 29063

888-560-2073

www.imcstips.com

inquiries@imcstips.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS (North America) +1 (800)255-3924
 VelocityEHS (International) +1 (813)248-0585
 IMCS Technical Support +1 (888)560-2073

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Not classified.

2.2. Label Elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains Glucuronidase, .beta.-(9001-45-0). May produce an allergic reaction.
 EUH210 - Safety data sheet available on request.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0,1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties 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

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
1,2,3-Propanetriol substance with national workplace exposure limit(s) (BE, CZ, DE, EE, ES, FI, FR, GB, GR, HR, PL, PT, SI, SK, CH)	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	1 – 10	Not classified.
Glucuronidase, .beta.-	(CAS-No.) 9001-45-0 (EC-No.) 232-606-8	< 1	Resp. Sens. 1, H334 Skin Sens. 1, H317
L-Histidine	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	0,01 – 1	Not classified.

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
substance with national workplace exposure limit(s) (LV)			
.beta.-Alanine substance with national workplace exposure limit(s) (LT, LV)	(CAS-No.) 107-95-9 (EC-No.) 203-536-5	0,1 – 1	Not classified.
Sodium azide substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	0,02	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

- First-Aid Measures General** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-Aid Measures After Inhalation** : When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
- First-Aid Measures After Skin Contact** : Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.
- First-Aid Measures After Eye Contact** : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- First-Aid Measures After Ingestion** : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

- Symptoms/Effects** : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/Effects After Inhalation** : Prolonged exposure may cause irritation.
- Symptoms/Effects After Skin Contact** : Prolonged exposure may cause skin irritation.
- Symptoms/Effects After Eye Contact** : May cause slight irritation to eyes.
- Symptoms/Effects After Ingestion** : Ingestion may cause adverse effects.
- Chronic Symptoms** : None expected under normal conditions of use. May cause an allergic reaction in sensitive individuals.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

- Suitable Extinguishing Media** : Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.
- Unsuitable Extinguishing Media** : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

- Fire Hazard** : Not considered flammable but may burn at high temperatures.
- Explosion Hazard** : Product is not explosive.
- Reactivity** : Hazardous reactions will not occur under normal conditions.
- Hazardous Combustion Products** : Carbon oxides (CO, CO₂). Nitrogen oxides. Acrolein.

5.3. Advice for Firefighters

- Precautionary Measures Fire** : Exercise caution when fighting any chemical fire.
- Firefighting Instructions** : Use water spray or fog for cooling exposed containers.
- Protection During Firefighting** : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

- General Measures** : Do not breathe vapour, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

- Protective Equipment** : Use appropriate personal protective equipment (PPE).
- Emergency Procedures** : Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

- Protective Equipment** : Equip cleanup crew with proper protection.
- Emergency Procedures** : Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

- For Containment** : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for Cleaning Up** : Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

- Precautions for Safe Handling** : Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapour, mist, spray). Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Hygiene Measures** : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

- Technical Measures** : Comply with applicable regulations.
- Storage Conditions** : Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible Materials** : Strong acids, strong bases, strong oxidisers.

7.3. Specific End Use(s)

Laboratory chemicals and liquid chromatography.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

L-Histidine (71-00-1)		
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	5 mg/m ³ (Aminoacids)
Sodium azide (26628-22-8)		
EU	IOELV TWA (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	0,1 mg/m ³
EU	IOELV STEL (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	0,3 mg/m ³
EU	Remark	Possibility of significant uptake through the skin
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	0,1 mg/m ³
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	0,3 mg/m ³
Austria	OEL Chemical Category (Legal Basis:BGBl. II Nr. 254/2018)	Skin notation
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	0,1 mg/m ³
Belgium	OEL Chemical Category (Legal Basis:Royal Decree 21/01/2020)	Skin, Skin notation
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	0,1 mg/m ³
Bulgaria	OEL STEL (Legal Basis:Reg. No. 13/10)	0,3 mg/m ³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	0,1 mg/m ³
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	0,3 mg/m ³
Croatia	OEL Chemical Category (Legal Basis:OG No. 91/2018)	Skin notation
Cyprus	OEL TWA (Legal Basis:KDP 16/2019)	0,1 mg/m ³
Cyprus	OEL STEL (Legal Basis:KDP 16/2019)	0,3 mg/m ³
Cyprus	OEL Chemical Category (Legal Basis:KDP 16/2019)	Skin-potential for cutaneous absorption
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	0,1 mg/m ³
Czech Republic	OEL Chemical Category (Legal Basis:Decree No. 107/2013)	Potential for cutaneous absorption
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,1 mg/m ³
Denmark	OEL STEL (Legal Basis:BEK No. 698 of 28/05/2020)	0,3 mg/m ³
Denmark	OEL Chemical Category (Legal Basis:BEK No. 698 of 28/05/2020)	Potential for cutaneous absorption
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	0,1 mg/m ³
Estonia	OEL STEL (Legal Basis:Regulation No. 105)	0,3 mg/m ³
Estonia	OEL Chemical Category (Legal Basis:Regulation No. 105)	Skin notation, Sensitizer
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	0,1 mg/m ³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	0,3 mg/m ³
Finland	OEL Chemical Category (Legal Basis:HTP-ARVOT 2020)	Potential for cutaneous absorption

Sodium azide (26628-22-8)		
France	OEL STEL (Legal Basis:INRS ED 984)	0,3 mg/m ³ (restrictive limit)
France	OEL TWA (Legal Basis:INRS ED 984)	0,1 mg/m ³ (restrictive limit)
France	OEL Chemical Category (Legal Basis:INRS ED 984)	Risk of cutaneous absorption
Germany	OEL TWA (Legal Basis:TRGS 900)	0,2 mg/m ³
Gibraltar	OEL TWA (Legal Basis:LN. 2018/181)	0,1 mg/m ³
Gibraltar	OEL STEL (Legal Basis:LN. 2018/181)	0,3 mg/m ³
Gibraltar	OEL Chemical Category (Legal Basis:LN. 2018/181)	Skin notation
Greece	OEL TWA (Legal Basis:PWHE)	0,3 mg/m ³
Greece	OEL TWA (Legal Basis:PWHE)	0,1 ppm
Greece	OEL STEL (Legal Basis:PWHE)	0,3 mg/m ³
Greece	OEL STEL (Legal Basis:PWHE)	0,1 ppm
Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	0,1 mg/m ³
Hungary	OEL STEL (Legal Basis:Decree No. 05/2020)	0,3 mg/m ³
Ireland	OEL TWA (Legal Basis:2020 COP)	0,1 mg/m ³
Ireland	OEL STEL (Legal Basis:2020 COP)	0,3 mg/m ³
Ireland	OEL Chemical Category (Legal Basis:Decree No. 05/2020)	Potential for cutaneous absorption
USA ACGIH	OEL Ceiling (Legal Basis:IMDFN1)	0,29 mg/m ³
USA ACGIH	OEL Ceiling (Legal Basis:IMDFN1)	0,11 ppm
Italy	OEL TWA (Legal Basis:Decree 81)	0,1 mg/m ³
Italy	OEL STEL (Legal Basis:Decree 81)	0,3 mg/m ³
Italy	OEL Chemical Category (Legal Basis:Decree 81)	skin - potential for cutaneous absorption
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	0,1 mg/m ³
Latvia	OEL Chemical Category (Legal Basis:Reg. No. 325)	skin - potential for cutaneous exposure
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	0,1 mg/m ³
Lithuania	OEL STEL (Legal Basis:HN 23:2011)	0,3 mg/m ³
Lithuania	OEL Chemical Category (Legal Basis:HN 23:2011)	Skin notation
Luxembourg	OEL TWA (Legal Basis:A-N 684)	0,1 mg/m ³
Luxembourg	OEL STEL (Legal Basis:A-N 684)	0,3 mg/m ³
Luxembourg	OEL Chemical Category (Legal Basis:A-N 684)	Possibility of significant uptake through the skin
Malta	OEL TWA (Legal Basis:MOHSAA Ch. 424)	0,1 mg/m ³
Malta	OEL STEL (Legal Basis:MOHSAA Ch. 424)	0,3 mg/m ³
Malta	OEL Chemical Category (Legal Basis:MOHSAA Ch. 424)	Possibility of significant uptake through the skin
Netherlands	OEL TWA (Legal Basis:OWCRLV)	0,1 mg/m ³
Netherlands	OEL STEL (Legal Basis:OWCRLV)	0,3 mg/m ³
Netherlands	OEL Chemical Category (Legal Basis:OWCRLV)	Skin notation
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	0,1 mg/m ³
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	0,3 mg/m ³ (value from the regulation)
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	0,1 mg/m ³
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	0,3 mg/m ³
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	0,1 mg/m ³ (indicative limit value)
Portugal	OEL STEL (Legal Basis:Portuguese Norm NP 1796:2014)	0,3 mg/m ³ (indicative limit value)
Portugal	OEL Ceiling (Legal Basis:Portuguese Norm NP 1796:2014)	0,29 mg/m ³
Portugal	OEL Ceiling (Legal Basis:Portuguese Norm NP 1796:2014)	0,11 ppm (vapor)
Portugal	OEL Chemical Category (Legal Basis:Portuguese Norm NP 1796:2014)	A4 - Not Classifiable as a Human Carcinogen,skin - potential for cutaneous exposure indicative limit value
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	0,1 mg/m ³
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	0,3 mg/m ³
Romania	OEL Chemical Category (Legal Basis:Gov. Dec. No 1.218)	Skin notation
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	0,1 mg/m ³ (Sodium azide)
Slovakia	OEL STEL (Legal Basis:Gov. Decree 33/2018)	0,3 mg/m ³
Slovakia	OEL Chemical Category (Legal Basis:Gov. Decree 33/2018)	Potential for cutaneous absorption
Slovenia	OEL TWA (Legal Basis:No. 79/19)	0,1 mg/m ³
Slovenia	OEL STEL (Legal Basis:No. 79/19)	0,3 mg/m ³
Slovenia	OEL Chemical Category (Legal Basis:No. 79/19)	Potential for cutaneous absorption
Spain	OEL TWA (Legal Basis:OELCAIS)	0,1 mg/m ³ (indicative limit value)
Spain	OEL STEL (Legal Basis:OELCAIS)	0,3 mg/m ³
Spain	OEL Chemical Category (Legal Basis:OELCAIS)	skin - potential for cutaneous absorption
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	0,1 mg/m ³
Sweden	OEL STEL (Legal Basis:AFS 2018:1)	0,3 mg/m ³

Sodium azide (26628-22-8)		
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	0,4 mg/m ³ (inhalable dust)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	0,2 mg/m ³ (also see Hydrazoic acid-inhalable dust)
.beta.-Alanine (107-95-9)		
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	10 mg/m ³
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	10 mg/m ³
1,2,3-Propanetriol (56-81-5)		
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	10 mg/m ³ (mist)
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	10 mg/m ³
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	10 mg/m ³
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	10 mg/m ³
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	20 mg/m ³
France	OEL TWA (Legal Basis:INRS ED 984)	10 mg/m ³ (aerosol)
Germany	OEL TWA (Legal Basis:TRGS 900)	200 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece	OEL TWA (Legal Basis:PWHE)	10 mg/m ³
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	10 mg/m ³ (inhalable fraction)
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	10 mg/m ³ (mist)
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	11 mg/m ³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	200 mg/m ³ (inhalable fraction)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	400 mg/m ³ (inhalable fraction)
Spain	OEL TWA (Legal Basis:OELCAIS)	10 mg/m ³ (mist)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	100 mg/m ³ (inhalable dust)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	50 mg/m ³ (inhalable dust)

8.2. Exposure Controls

Appropriate Engineering Controls

: Ensure adequate ventilation, especially in confined areas. Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.



Materials for Protective Clothing

Hand Protection

: Chemically resistant materials and fabrics.

Eye Protection

: Wear protective gloves.

Skin and Body Protection

: Chemical safety goggles.

Respiratory Protection

: Wear suitable protective clothing.

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Colour, Appearance	: Colourless
Odour	: Odourless
Odour Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-Ignition Temperature	: No data available
Decomposition Temperature	: No data available

Flammability	: Not applicable
Vapour Pressure	: No data available
Relative Vapour Density At 20°C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient n-Octanol/Water	: No data available
Viscosity	: No data available
Explosive Properties	: No data available
Oxidising Properties	: No data available
Explosive Limits	: No data available
Particle Aspect Ratio	: Not applicable
Particle Aggregation State	: Not applicable
Particle Agglomeration State	: Not applicable
Particle Specific Surface Area	: Not applicable
Particle Dustiness	: Not applicable

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidisers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO₂). Nitrogen oxides. Acrolein.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (EC) No 1272/2008

Likely Routes of Exposure	: Dermal, Ingestion, Inhalation, Eye contact
Acute Toxicity (Oral)	: Not classified. (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal)	: Not classified. (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation)	: Not classified. (Based on available data, the classification criteria are not met)

L-Histidine (71-00-1)	
LD50 Oral Rat	> 15 g/kg (Source: NLM_CIP)
Sodium azide (26628-22-8)	
LD50 Oral Rat	27 mg/kg (Source: NZ_CCID)
LD50 Dermal Rabbit	20 mg/kg (Source: NLM_HSDB)
LC50 Inhalation Rat	0,054 – 0,52 mg/l/4h (Dust/Mist - mg/l/4h)
.beta.-Alanine (107-95-9)	
LD50 Oral Rat	> 5000 mg/kg
1,2,3-Propanetriol (56-81-5)	
LD50 Oral Rat	12600 mg/kg (Source: NLM_CIP)
LD50 Dermal Rabbit	> 10 g/kg (Source: NLM_CIP)
LC50 Inhalation Rat	> 2,75 mg/l/4h (No mortalities)

Skin Corrosion/Irritation	: Not classified. (Based on available data, the classification criteria are not met)
Eye Damage/Irritation	: Not classified. (Based on available data, the classification criteria are not met)
Respiratory or Skin Sensitisation	: Not classified. (Based on available data, the classification criteria are not met)
Germ Cell Mutagenicity	: Not classified. (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified. (Based on available data, the classification criteria are not met)
Reproductive Toxicity	: Not classified. (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Single Exposure)	: Not classified. (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Repeated Exposure)	: Not classified. (Based on available data, the classification criteria are not met)

Aspiration Hazard	: Not classified. (Based on available data, the classification criteria are not met)
Symptoms/Injuries After Inhalation	: Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	: Ingestion may cause adverse effects.
Chronic Symptoms	: None expected under normal conditions of use. May cause an allergic reaction in sensitive individuals.

11.2. Information On Other Hazards

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short-Term (Acute) : Not classified. (Based on available data, the classification criteria are not met)

Hazardous To The Aquatic Environment, Long-Term (Chronic) : Not classified. (Based on available data, the classification criteria are not met)

Sodium azide (26628-22-8)	
LC50 - Fish [1]	0,8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 - Fish [2]	0,7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 algae	0,348 mg/l
.beta.-Alanine (107-95-9)	
LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 - Crustacea [1]	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna [static])
1,2,3-Propanetriol (56-81-5)	
LC50 - Fish [1]	54000 (51000 – 57000) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and Degradability

IMCSzyme® RT	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

IMCSzyme® RT	
Bioaccumulative Potential	Not established.
.beta.-Alanine (107-95-9)	
Partition coefficient n-octanol/water (Log Pow)	-3,05
1,2,3-Propanetriol (56-81-5)	
BCF Fish 1	(no bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	-1,75 at 25 °C (at pH 7.4)

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Does not contain any PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XVIII

12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Product/Packaging Disposal Recommendations : Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials : Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued. In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN Number or ID Number
Not regulated for transport
14.2. UN Proper Shipping Name
Not regulated for transport
14.3. Transport Hazard Class(es)
Not regulated for transport
14.4. Packing Group
Not regulated for transport
14.5. Environmental Hazards
Not regulated for transport

14.6. Special Precautions For User

No additional information available

14.7. Maritime Transport in Bulk According to IMO instruments

Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

15.1.1. EU-Regulations

15.1.1.1. REACH Annex XVII Information

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	IMCSzyme® RT ; Glucuronidase, .beta.-
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15.1.1.2. REACH Candidate List Information

Contains no substance(s) listed on the REACH Candidate List

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

15.1.1.5. REACH Annex XIV Information

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information

No additional information available

15.1.1.7. EC Inventory Information

Glucuronidase, .beta.- (9001-45-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
L-Histidine (71-00-1)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Sodium azide (26628-22-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
.beta.-Alanine (107-95-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
1,2,3-Propanetriol (56-81-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.1.8. Other Information

No additional information available

15.1.2. National Regulations

No additional information available

15.1.3. International Inventory Lists

Glucuronidase, .beta.- (9001-45-0)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
L-Histidine (71-00-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)
 Listed on the NCI (Vietnam - National Chemical Inventory)
 Listed on Thailand Existing Chemicals Inventory (DIW)

Sodium azide (26628-22-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
 Listed on the Canadian DSL (Domestic Substances List)
 Listed on the United States SARA Section 302
 Subject to reporting requirements of United States SARA Section 313
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Japanese Poisonous and Deleterious Substances Control Law
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)
 Listed on the NCI (Vietnam - National Chemical Inventory)

.beta.-Alanine (107-95-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
 Listed on the Canadian DSL (Domestic Substances List)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)
 Listed on the NCI (Vietnam - National Chemical Inventory)

1,2,3-Propanetriol (56-81-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
 Listed on the Canadian DSL (Domestic Substances List)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)
 Listed on the NCI (Vietnam - National Chemical Inventory)
 Listed on Thailand Existing Chemicals Inventory (DIW)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision : 05/06/2024

Data Sources : Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

Other Information : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H- and EUH-statements:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
EUH208	Contains Glucuronidase, .beta.- (9001-45-0). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
H300	Fatal if swallowed.
H310	Fatal in contact with skin.

H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1

Indication of Changes

No additional information available

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
 ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
 ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
 ATE - Acute Toxicity Estimate
 BCF - Bioconcentration Factor
 BEI - Biological Exposure Indices (BEI)
 BOD – Biochemical Oxygen Demand
 CAS No. - Chemical Abstracts Service Number
 CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
 COD – Chemical Oxygen Demand
 EC – European Community
 EC50 - Median Effective Concentration
 EEC – European Economic Community
 EINECS – European Inventory of Existing Commercial Chemical Substances
 EmS-No. (Fire) - IMDG Emergency Schedule Fire
 EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
 EU – European Union
 ErC50 - EC50 in Terms of Reduction Growth Rate
 GHS – Globally Harmonized System of Classification and Labeling of Chemicals
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 IBC Code - International Bulk Chemical Code
 IMDG - International Maritime Dangerous Goods
 IPRV - Ilgalaikio Poveikio Ribinis Dydis
 IOELV – Indicative Occupational Exposure Limit Value
 LC50 - Median Lethal Concentration
 LD50 - Median Lethal Dose
 LOAEL - Lowest Observed Adverse Effect Level
 LOEC - Lowest-Observed-Effect Concentration
 Log K_{oc} - Soil Organic Carbon-water Partitioning Coefficient
 Log K_{ow} - Octanol/water Partition Coefficient
 Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
 MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
 MARPOL - International Convention for the Prevention of Pollution

NDS - Najwyższe Dopuszczalne Stezenie
 NDSC - Najwyższe Dopuszczalne Stezenie Chwilowe
 NDSP - Najwyższe Dopuszczalne Stezenie Pulapowe
 NOAEL - No-Observed Adverse Effect Level
 NOEC - No-Observed Effect Concentration
 NRD - Nevirsytinas Ribinis Dydis
 NTP – National Toxicology Program
 OEL - Occupational Exposure Limits
 PBT - Persistent, Bioaccumulative and Toxic
 PEL - Permissible Exposure Limit
 pH – Potential Hydrogen
 REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
 RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
 SADT - Self Accelerating Decomposition Temperature
 SDS - Safety Data Sheet
 STEL - Short Term Exposure Limit
 STOT - Specific Target Organ Toxicity
 TA-Luft - Technische Anleitung zur Reinhaltung der Luft
 TEL TRK – Technical Guidance Concentrations
 ThOD – Theoretical Oxygen Demand
 TLM - Median Tolerance Limit
 TLV - Threshold Limit Value
 TPRD - Trumpalaikio Poveikio Ribinis Dydis
 TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
 TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
 TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
 TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
 TSCA - Toxic Substances Control Act
 TWA - Time Weighted Average
 VOC – Volatile Organic Compounds
 VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
 VLA-ED - Valor Límite Ambiental Exposición Diaria
 VLE – Valeur Limite D'exposition
 VME – Valeur Limite De Moyenne Exposition
 vPvB - Very Persistent and Very Bioaccumulative
 WEL – Workplace Exposure Limit
 WGK - Wassergefährdungsklasse

Glossary of Data Source Abbreviations

ATSDR: Agency for Toxic Substances and Disease Registry (U.S. Department of Health and Human Services)
 AU_WES: Australia WES
 CHEMVIEW: ChemView (U.S. Environmental Protection Agency)
 EC_RAR: European Commission Renewal Assessment Report
 EC_SCOEL: European Commission Scientific Committee on Occupational Exposure Limits
 ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals Reports
 ECHA_API: European Chemicals Agency API
 ECHA_RAC: ECHA Committee for Risk Assessment
 EFSA: European Food Safety Authority
 EPA: U.S. Environmental Protection Agency
 EPA_AEGL: Acute Exposure Guideline Levels (U.S. Environmental Protection Agency)
 EPA_FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act Reregistration Eligibility Decision (U.S. Environmental Protection Agency)
 EPA_HPVC: High Production Volume Chemicals (U.S. Environmental Protection Agency)
 EPA_TRED: Risk Assessment for Tolerance Reassessment Eligibility Decision (U.S. Environmental Protection Agency)

FOOD_JOURN: Food Research Journal (1956)
 IARC: The International Agency for Research on Cancer
 IDLH: National Institute for Occupational Health and Safety Immediately Dangerous to Life or Health Value Profiles
 IUCLID: International Uniform Chemical Information Database
 JAPAN_GHS: Japan GHS Basis for Classification Data
 JP_J-CHECK: Japan J-Check
 KR_NIER: South Korea National Institute of Environmental Research Evaluations
 NICNAS: Australia National Industrial Chemicals Notification and Assessment Scheme
 NIOSH: National Institute for Occupational Health and Safety (U.S. Department of Health and Human Services)
 NLM_CIP: National Library of Medicine ChemID plus database
 NLM_HSD: National Library of Medicine Hazardous Substance Data Bank
 NLM_PUBMED: National Library of Medicine PubMed database
 NTP: National Toxicology Program
 NZ_CCID: New Zealand Chemical Classification and Information Database
 OECD_EHSP: Environment, Health, and Safety Publication (Organisation for Economic Co-operation and Development)
 OECD_SIDS: Screening Information Data Sets (Organisation for Economic Co-

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendments

EU - 2019/1831 EU in accord. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.

EU - 2019/1243/EU, and 98/24/EC - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.

Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBl. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.

Austria - BLV BGBl. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBl. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 - Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

Cyprus - KDP 16/2019 - Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 - Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 - Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006.

Czech Republic - Reg. 41/2020 - Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended

Czech Republic - Decree No. 107/2013 - Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit values for the parameters of biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents

Denmark - BEK No. 698 of 28/05/2020 - Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 - Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020

Estonia - Regulation No. 105 - Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents

Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020.

Finland - HTP-ARVOT 2020 - Concentrations Known to be Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.

France - INRS ED 984 - Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.

France - Decree 2009-1570 - Decree 2009-1570 of December 15, 2009,

Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.

Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents

Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1

Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020

Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1)

Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

Luxembourg - A-N 684 - Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

Malta - MOSHAA Ch. 424 - Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198, and 57.

Netherlands- OWCRLV - Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

Norway - FOR-2020-04-060695 - Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353.

Poland - Dz. U. 2020 Nr. 61 - Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 - List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.

Portugal - Portuguese Norm NP 1796:2014 - Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020.

Romania - Gov. Dec. No 1.218 - Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.

Slovakia - Gov. Decree 33/2018 - Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents

Slovenia - No. 79/19 - Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001 . Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19

Spain - AFS 2018:1 - NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019

Sweden - AFS 2018:1 - Statute Book of the Swedish Work Environment Authority, AFS 2018:1

relative to the control of chemical risk on workplaces.

Germany - TRGS 900 - Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020

Germany - TRGS 903 - Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020

Gibraltar - LN. 2018/131 - Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181.

The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values

Switzerland - OLVSNAIF - Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

EU GHS SDS (2020/878)