# **Material Safety Data Sheet**

# **SureFast® PREP DNA/RNA Virus**

Art. No. F1051

## **November 2024**







## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: inv\_0118 Issue date: 14/10/2022 Version: 1.0

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

#### 1.1. Product identifier

: Mixture Product form

Trade name Extraction Tubes

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use : Laboratory chemicals Use of the substance/mixture

## 1.2.2. Uses advised against

No additional information available.

## 1.3. Details of the supplier of the safety data sheet

#### Distributor

CONGEN Biotechnologie GmbH Robert-Roessle-Straße 10 DE 13125 Berlin T+49 30 9489-3500, F+49 30 9489-3510 info@congen.de, www.congen.de

## 1.4. Emergency telephone number

No additional information available.

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302 H315 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 1 H318 Specific target organ toxicity - Repeated exposure, Category 2 H373 Hazardous to the aquatic environment - Acute Hazard, H400

Category 1

Hazardous to the aquatic environment - Chronic Hazard, H411

Category 2

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

## Adverse physicochemical, human health and environmental effects

May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

## 2.2. Label elements

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

Hazard pictograms (CLP)









GHS07 GHS05

GHS08

GHS09

Signal word (CLP) : Danger

: ammonium chloride; Hexadecyltrimethylammonium bromide Contains

Hazard statements (CLP) : H302 - Harmful if swallowed. H315 - Causes skin irritation.

H318 - Causes serious eye damage.

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

H373 - May cause damage to organs through prolonged or repeated exposure.

 $\mbox{H410}\mbox{ - Very toxic to a$  $quatic life with long lasting effects.}$ 

 $\label{eq:precautionary statements (CLP)} Fecautionary statements (CLP) \qquad \qquad : P260 - Do \ not \ breathe \ dust/fume/gas/mist/vapours/spray.$ 

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

 ${\tt P280-Wear\ protective\ gloves/protective\ clothing/eye\ protection/face\ protection/hearing}$ 

protection.

P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of water.

 ${\it P305+P351+P338-IF\ IN\ EYES:}\ Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove$ 

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor. P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

 $\ensuremath{\mathsf{P501}}$  - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

: EUH208 - Contains Proteinase, Tritirachium album serine (39450-01-6). May produce an

allergic reaction.

## 2.3. Other hazards

**EUH-statements** 

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not 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 at a concentration equal to or greater than 0,1 %

## 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 [CLP]
ammonium chloride substance with national workplace exposure limit(s) (IE)	CAS-No.: 12125-02-9 EC-No.: 235-186-4 EC Index-No.: 017-014-00-8 REACH-no: 01-2119487950-27	50 - <100	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Irrit. 2, H319
Hexadecyltrimethylammonium bromide	CAS-No.: 57-09-0 EC-No.: 200-311-3 REACH-no: 01-2119989160-35	10 - <20	Acute Tox. 4 (Oral), H302 (ATE=410 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Proteinase, Tritirachium album serine	CAS-No.: 39450-01-6 EC-No.: 254-457-8	0,1 - <1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335

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

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

## 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact

with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

## 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal

protective equipment.

14/10/2022 (Issue date) IE - en 3/12

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hygiene measures

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

ammonium chloride (12125-02-9)		
Ireland - Occupational Exposure Limits		
Local name	Ammonium chloride, fume	
OEL TWA	10 mg/m³	
OEL STEL	20 mg/m³	
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2024	

## 8.1.2. Recommended monitoring procedures

No additional information available.

## 8.1.3. Air contaminants formed

No additional information available.

#### 8.1.4. DNEL and PNEC

No additional information available.

#### 8.1.5. Control banding

No additional information available.

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

## Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

## Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

#### Eye protection:

Safety glasses

## 8.2.2.2. Skin protection

## Skin and body protection:

Wear suitable protective clothing

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### Hand protection:

Protective gloves

## 8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available.

#### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Solid Colour Colourless. Odour odourless. Odour threshold : Not available Melting point : Not applicable : Not available Freezing point : Not available Boiling point : Non flammable. Flammability Lower explosion limit : Not applicable Upper explosion limit : Not applicable Flash point : Not applicable : Not applicable Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ : Not available pH solution Viscosity, kinematic : Not applicable : Not available Solubility Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : Not available : Not available Relative density Relative vapour density at 20°C : Not applicable

#### 9.2. Other information

Particle size

## 9.2.1. Information with regard to physical hazard classes

No additional information available.

## 9.2.2. Other safety characteristics

No additional information available.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

: Not available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Extraction Tubes		
ATE CLP (oral) 601.851 mg/kg bodyweight		
ammonium chloride (12125-02-9)		
LD50 oral rat	1410 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 1260 - 1550	
LD50 oral	1410 mg/kg bodyweight	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
LD50 dermal	> 2000 mg/kg bodyweight	
Hexadecyltrimethylammonium bromide (57-09-0)		
LD50 oral rat	410 mg/kg	

EBOO GIAITAL	110 mg/kg
Skin corrosion/irritation	: Causes skin irritation.

ammonium chloride (12125-02-9)	
На	5 – 5.5 Temp.: 25 °C Concentration: [1 vol%,10 vol%] Remarks on result: 'other:'

## Proteinase, Tritirachium album serine (39450-01-6)

рН	6.2 - 6.8

Serious eye damage/irritation : Causes serious eye damage.

ammonium chloride (12125-02-9)	
На	5 – 5.5 Temp.: 25 °C Concentration: [1 vol%,10 vol%] Remarks on result: 'other:'

Proteinase, Tritirachium album serine (39450-01-6)	
pH 6.2 – 6.8	

Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSTOT-single exposure: Not classified

Hexadecyltrimethylammonium bromide (57-09-0)	
STOT-single exposure	May cause respiratory irritation.
Proteinase, Tritirachium album serine (39450-01-6)	

Proteinase, Tritirachium album serine (39450-01-6)	
STOT-single exposure	May cause respiratory irritation.

14/10/2022 (Issue date) IE - en 6/12

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

TOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.		
ammonium chloride (12125-02-9)		
NOAEL (oral, rat, 90 days) ≈ 1695.7 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose Day Oral Toxicity Study in Rodents)		
Hexadecyltrimethylammonium bromide (57-09-0)		
LOAEL (dermal, rat/rabbit, 90 days)	10 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)	
NOAEL (oral, rat, 90 days)	10 mg/kg bodyweight Animal: rat	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	

## 11.2. Information on other hazards

No additional information available.

## SECTION 12: Ecological information

## 12.1. Toxicity

Aspiration hazard

Ecology - general : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

: Not classified

Hazardous to the aquatic environment, short-term : Very toxic to aquatic life.

(acute

Hazardous to the aquatic environment, long-term : Toxic to aquatic life with long lasting effects.

(chronic)

ammonium chloride (12125-02-9)		
LC50 - Fish [1]	42.91 mg/l	
EC50 - Crustacea [1]	136.6 mg/l Test organisms (species): Daphnia magna	
EC50 - Other aquatic organisms [1]	0.39 mg/l waterflea	
EC50 - Other aquatic organisms [2]	7.16 mg/l	
Hexadecyltrimethylammonium bromide (57-09-0)		
LC50 - Fish [1]	0.2 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	26 μg/l Test organisms (species): Daphnia magna	
NOEC (chronic)	0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

## 12.2. Persistence and degradability

Extraction Tubes		
Persistence and degradability	Rapidly degradable	
ammonium chloride (12125-02-9)		
Persistence and degradability Rapidly degradable		
Hexadecyltrimethylammonium bromide (57-09-0)		
Persistence and degradability Rapidly degradable		
Proteinase, Tritirachium album serine (39450-01-6)		
Persistence and degradability	Rapidly degradable	

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## 12.3. Bioaccumulative potential

ammonium chloride (12125-02-9)		
Partition coefficient n-octanol/water (Log Pow) -4.37		
Hexadecyltrimethylammonium bromide (57-09-0)		
Tiexadecyitiinietiiyiaiiiiioiiidiii bioiiiide (37-09-0	")	

## 12.4. Mobility in soil

No additional information available.

## 12.5. Results of PBT and vPvB assessment

No additional information available.

## 12.6. Endocrine disrupting properties

No additional information available.

## 12.7. Other adverse effects

No additional information available.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW, EC 2000/532) : 07 07 99 - wastes not otherwise specified

R/D code (Recovery/Disposal, EU 2008/98) : D10 - Incineration on land

## SECTION 14: Transport information

n accordance with ADR / IMDG / IATA / ADN / RID					
ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID nu	14.1. UN number or ID number				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077	
14.2. UN proper shipping	name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide)	Environmentally hazardous substance, solid, n.o.s. (Hexadecyltrimethylammoni um bromide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide)	
Transport document descrip	tion				
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (Hexadecyltrimethylammoni um bromide), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexadecyltrimethylammoni um bromide), 9, III	
14.3. Transport hazard cl	14.3. Transport hazard class(es)				
9	9	9	9	9	
		**************************************	**************************************	**************************************	

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
III	III	III	III	III
14.5. Environmental haza	ards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information	on available	ı		1

## 14.6. Special precautions for user

## **Overland transport**

Classification code (ADR) : M.

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3
Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V13
Special provisions for carriage - Bulk (ADR) : VC1, VC2
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3077

Tunnel restriction code (ADR) :

## Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP02, P002
Special packing provisions (IMDG) : PP12
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : BK1, BK2, BK3, T1

Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW23

## Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg

14/10/2022 (Issue date) IE - en 9/12

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

Special provisions (IATA) : A97, A158, A179, A197, A215

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T\* B\*\*

Equipment required (ADN) : PP, A\*\*\*

Number of blue cones/lights (ADN) : 0

Additional requirements/Remarks (ADN) : \*Only in the molten state. \*\*For carriage in bulk see also 7.1.4.1. \*\*\*Only in the case of

transport in bulk.

Rail transport

Classification code (RID) : M7

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5kg Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : PP12, B3
Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions : TP33

(RID)

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W13

Special provisions for carriage – Bulk (RID) : VC1, VC2

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE11
Hazard identification number (RID) : 90

## 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

## **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

## **REACH Annex XIV (Authorisation List)**

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

## REACH Candidate List (SVHC)

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

## PIC Regulation (Prior Informed Consent)

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

#### **POP Regulation (Persistent Organic Pollutants)**

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

## Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

## **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

## **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available.

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: C	Other information
Abbreviations a	and acronyms:
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
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
EUH208	Contains Proteinase, Tritirachium album serine (39450-01-6). May produce an allergic reaction.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H335	May cause respiratory irritation.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

Safety Data Sheet (SDS), EU

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.



## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: inv\_0143 Issue date: 14/10/2022 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture Pre-Wash Buffer Trade name

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use : Laboratory chemicals Use of the substance/mixture

## 1.2.2. Uses advised against

No additional information available.

## 1.3. Details of the supplier of the safety data sheet

#### Distributor

CONGEN Biotechnologie GmbH Robert-Roessle-Straße 10 DE 13125 Berlin T+49 30 9489-3500, F+49 30 9489-3510 info@congen.de, www.congen.de

## 1.4. Emergency telephone number

No additional information available.

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302 H314 Skin corrosion/irritation, Category 1, Sub-Category 1B H318 Serious eye damage/eye irritation, Category 1 Hazardous to the aquatic environment - Chronic Hazard, H412

Category 3

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

## Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

## 2.2. Label elements

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

Hazard pictograms (CLP)



GHS05

GHS07

Signal word (CLP) : Danger

guanidinium thiocyanate Contains Hazard statements (CLP) : H302 - Harmful if swallowed.

> H314 - Causes severe skin burns and eye damage. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

 ${\it P303+P361+P353-IF\ ON\ SKIN\ (or\ hair): Take\ off\ immediately\ all\ contaminated\ clothing.}$ 

Rinse skin with water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not 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 at a concentration equal to or greater than 0,1 %

## 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 [CLP]
guanidinium thiocyanate	CAS-No.: 593-84-0 EC-No.: 209-812-1 EC Index-No.: 615-004-00-3 REACH-no: 01-2120735072-65	45 - <55	Acute Tox. 4 (Oral), H302 (ATE=593 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=3.18 mg/l/4h) Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412 EUH032 EUH071

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 : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

14/10/2022 (Issue date) IE - en 2/10

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

## 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

No additional information available.

## 8.1.2. Recommended monitoring procedures

No additional information available.

#### 8.1.3. Air contaminants formed

No additional information available.

14/10/2022 (Issue date) IE - en 3/10

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### 8.1.4. DNEL and PNEC

No additional information available.

#### 8.1.5. Control banding

No additional information available.

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

## Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

## Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

## Eye protection:

Safety glasses

## 8.2.2.2. Skin protection

## Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves

## 8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

## 8.2.2.4. Thermal hazards

No additional information available.

## 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless. Colour Odour odourless. : Not available Odour threshold Melting point : Not applicable Freezing point : Not available Boiling point : Not available Flammability : Non flammable. Lower explosion limit : Not available Upper explosion limit : Not available Flash point : Not available Auto-ignition temperature : Not available : Not available Decomposition temperature : Not available рΗ Viscosity, kinematic : Not available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available : Not available Density : Not available Relative density : Not available Relative vapour density at 20°C Particle characteristics : Not applicable

## 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available.

## 9.2.2. Other safety characteristics

No additional information available.

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Pre-Wash Buffer		
ATE CLP (oral)	1256.356 mg/kg bodyweight	
guanidinium thiocyanate (593-84-0)		
LD50 oral rat	593 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 431 - 816	
LC50 Inhalation - Rat	3.18 mg/l	
Skin corrosion/irritation :	Causes severe skin burns.	

guanidinium thiocyanate (593-84-0)	
рН	5 – 7

Serious eye damage/irritation : Causes serious eye damage.

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

guanidinium thiocyanate (593-84-0)		
рН	5 – 7	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

#### 11.2. Information on other hazards

No additional information available.

## SECTION 12: Ecological information

## 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term

: Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Harmful to aquatic life with long lasting effects.

(chronic)

guanidinium thiocyanate (593-84-0)		
LC50 - Fish [1]	≈ 89.1 mg/l Test organisms (species): Poecilia reticulata	
EC50 - Crustacea [1]	42.4 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	130 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

## 12.2. Persistence and degradability

Pre-Wash Buffer		
Persistence and degradability	Rapidly degradable	
guanidinium thiocyanate (593-84-0)		
Persistence and degradability	Rapidly degradable	

## 12.3. Bioaccumulative potential

No additional information available.

## 12.4. Mobility in soil

No additional information available.

## 12.5. Results of PBT and vPvB assessment

No additional information available.

## 12.6. Endocrine disrupting properties

No additional information available.

## 12.7. Other adverse effects

No additional information available.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

14/10/2022 (Issue date) IE - en 6/10

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

European List of Waste (LoW, EC 2000/532) : 07 07 99 - wastes not otherwise specified

R/D code (Recovery/Disposal, EU 2008/98) : D10 - Incineration on land

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID nui	mber			
UN 1760	UN 1760	UN 1760	UN 1760	UN 1760
14.2. UN proper shipping	name			
CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)	Corrosive liquid, n.o.s. (guanidinium thiocyanate)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)
Transport document descript	tion			
UN 1760 CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate), 8, II, (E)	UN 1760 CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate), 8, II	UN 1760 Corrosive liquid, n.o.s. (guanidinium thiocyanate), 8, II	UN 1760 CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate), 8, II	UN 1760 CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate), 8, II
14.3. Transport hazard cla	ass(es)			
8	8	8	8	8
8	B	8	8	8
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haza	rds			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

## 14.6. Special precautions for user

## **Overland transport**

Classification code (ADR) : C9 Special provisions (ADR) : 274 Limited quantities (ADR) 11 Excepted quantities (ADR) : E2 Packing instructions (ADR) : P001, IBC02 : MP15 Mixed packing provisions (ADR) : T11 Portable tank and bulk container instructions (ADR) : TP2, TP27 Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : L4BN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80

Orange plates

80 1760

Tunnel restriction code (ADR)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 : IBC02 IBC packing instructions (IMDG) Tank instructions (IMDG) : T11 Tank special provisions (IMDG) : TP2, TP27 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-B Stowage category (IMDG) : B Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

## Air transport

PCA Excepted quantities (IATA) : E2 : Y840 PCA Limited quantities (IATA) : 0.5L PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) : 851 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) : 855 CAO max net quantity (IATA) : 30L Special provisions (IATA) : A3, A803 ERG code (IATA) : 8L

## Inland waterway transport

Classification code (ADN) : C9
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

#### Rail transport

Classification code (RID): C9Special provisions (RID): 274Limited quantities (RID): 1LExcepted quantities (RID): E2

Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions : TP2, TP27

(RID)

Tank codes for RID tanks (RID): L4BNTransport category (RID): 2Colis express (express parcels) (RID): CE6Hazard identification number (RID): 80

## 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

## **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### **REACH Annex XIV (Authorisation List)**

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

#### **REACH Candidate List (SVHC)**

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

## PIC Regulation (Prior Informed Consent)

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

#### POP Regulation (Persistent Organic Pollutants)

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

## Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

## Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

#### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

## **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## 15.1.2. National regulations

No additional information available.

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information			
Abbreviations and acronyms:			
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		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:			
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disruptor		

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
EUH032	Contact with acids liberates very toxic gas.	
EUH071	Corrosive to the respiratory tract.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H332	Harmful if inhaled.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	

Safety Data Sheet (SDS), EU

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.



## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: inv\_0145 Issue date: 11/10/2016 Revision date: 14/10/2022 Supersedes version of: 08/04/2019 Version: 5.0

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

#### 1.1. Product identifier

Product form · Mixture Wash Buffer Trade name

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use : Laboratory chemicals Use of the substance/mixture

## 1.2.2. Uses advised against

No additional information available.

## 1.3. Details of the supplier of the safety data sheet

#### Distributor

CONGEN Biotechnologie GmbH Robert-Roessle-Straße 10 DE 13125 Berlin T+49 30 9489-3500, F+49 30 9489-3510 info@congen.de, www.congen.de

## 1.4. Emergency telephone number

No additional information available.

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

## Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

No labelling applicable

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not 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 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

## 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing

First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available.

14/10/2022 (Revision date) IE - en 2/8

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

No additional information available.

#### 8.1.2. Recommended monitoring procedures

No additional information available.

#### 8.1.3. Air contaminants formed

No additional information available.

#### 8.1.4. DNEL and PNEC

No additional information available.

#### 8.1.5. Control banding

No additional information available.

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

## Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

## Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves

## 8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

## 8.2.2.4. Thermal hazards

No additional information available.

## 8.2.3. Environmental exposure controls

## Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour : odourless.
Odour threshold : Not available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Melting point : Not applicable : Not available Freezing point Boiling point : Not available Flammability : Non flammable. Lower explosion limit : Not available : Not available Upper explosion limit Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available Viscosity, kinematic : Not available Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50°C : Not available : Not available Density : Not available Relative density Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

## 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available.

#### 9.2.2. Other safety characteristics

No additional information available.

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

: Not classified Acute toxicity (oral) Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

#### 11.2. Information on other hazards

No additional information available.

## SECTION 12: Ecological information

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

: Not classified

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

nt, long-term : Not classified

(chronic)

## 12.2. Persistence and degradability

Wash Buffer	
Persistence and degradability	Rapidly degradable

## 12.3. Bioaccumulative potential

No additional information available.

## 12.4. Mobility in soil

No additional information available.

## 12.5. Results of PBT and vPvB assessment

No additional information available.

#### 12.6. Endocrine disrupting properties

No additional information available.

## 12.7. Other adverse effects

No additional information available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW, EC 2000/532) : 07 07 99 - wastes not otherwise specified

R/D code (Recovery/Disposal, EU 2008/98) : D10 - Incineration on land

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID		
14.3. Transport hazard cl	14.3. Transport hazard class(es)					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
14.4. Packing group						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
14.5. Environmental hazards						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
No supplementary information available						

## 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

## 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

## **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

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

#### **REACH Candidate List (SVHC)**

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

## PIC Regulation (Prior Informed Consent)

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

## POP Regulation (Persistent Organic Pollutants)

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

## Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

## **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## 15.1.2. National regulations

No additional information available.

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information				
Abbreviations and acro	Abbreviations and acronyms:			
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			
BLV	Biological limit value			
BOD	Biochemical oxygen demand (BOD)			
COD	Chemical oxygen demand (COD)			
DMEL	Derived Minimal Effect level			
DNEL	Derived-No Effect Level			
EC-No.	European Community number			
EC50	Median effective concentration			
EN	European Standard			
IARC	International Agency for Research on Cancer			
IATA	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Median lethal concentration			
LD50	Median lethal dose			
LOAEL	Lowest Observed Adverse Effect Level			
NOAEC	No-Observed Adverse Effect Concentration			
NOAEL	No-Observed Adverse Effect Level			
NOEC	No-Observed Effect Concentration			
OECD	Organisation for Economic Co-operation and Development			
OEL	Occupational Exposure Limit			
PBT	Persistent Bioaccumulative Toxic			
PNEC	Predicted No-Effect Concentration			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
SDS	Safety Data Sheet			
STP	Sewage treatment plant			

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Safety Data Sheet (SDS), EU

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.



## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: inv\_0154 Issue date: 11/10/2016 Revision date: 14/10/2022 Supersedes version of: 08/04/2019 Version: 5.0

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

#### 1.1. Product identifier

Product form · Mixture Flution Buffer Trade name

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use : Laboratory chemicals Use of the substance/mixture

## 1.2.2. Uses advised against

No additional information available

## 1.3. Details of the supplier of the safety data sheet

#### Distributor

CONGEN Biotechnologie GmbH Robert-Roessle-Straße 10 DE 13125 Berlin T+49 30 9489-3500, F+49 30 9489-3510 info@congen.de, www.congen.de

## 1.4. Emergency telephone number

No additional information available

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

## Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

No labelling applicable

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not 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 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

## 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing

First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide

## 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available

14/10/2022 (Revision date) IE - en 2/8

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

## Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

## Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves

## 8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

## 8.2.2.4. Thermal hazards

No additional information available

## 8.2.3. Environmental exposure controls

## Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour : odourless.
Odour threshold : Not available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Melting point : Not applicable : Not available Freezing point Boiling point : Not available Flammability : Non flammable. Lower explosion limit : Not available : Not available Upper explosion limit Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available Viscosity, kinematic : Not available Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50°C : Not available : Not available Density : Not available Relative density Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

## 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

: Not classified Acute toxicity (oral) Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

#### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

: Not classified

## 12.2. Persistence and degradability

Elution Buffer	
Persistence and degradability	Rapidly degradable

## 12.3. Bioaccumulative potential

No additional information available

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW, EC 2000/532) : 07 07 99 - wastes not otherwise specified

R/D code (Recovery/Disposal, EU 2008/98) : D10 - Incineration on land

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

## 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

## 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

## **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

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

## POP Regulation (Persistent Organic Pollutants)

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

## Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information			
Abbreviations and acronyms:			
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		
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EC50	Median effective concentration		
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IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
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LC50	Median lethal concentration		
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LOAEL	Lowest Observed Adverse Effect Level		
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OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
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TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Safety Data Sheet (SDS), EU

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.