

#### 2 Hazards Identification

#### 2.1 Classification of the substance or mixture *CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]*

Flammable solids, (Category 2), H228 Acute toxicity, Oral, (Category 4), H302 Acute toxicity, Inhaled, (Category 4), H332 Skin corrosion or irritation, (Category 2), H315 Serious eye damage or eye irritation, (Category 1), H318 Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335 Hazardous to the aquatic environment, long term hazard, (Category 3), H412 Serious eye damage or eye irritation, (Category 2A), H319 Sensitisation, respiratory, (Category 1), H334 For the full text of the H-Statements mentioned in this Section, See Section 16

#### 2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008



Pictogram

Signal word Danger

Hazard Statement(s)

H228 Flammable solid

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H302	Harmful if swallowed			
H332	Harmful if inhaled			
H315	Causes skin irritation			
H318	Causes serious eye damage			
H335	May cause respiratory irritation			
H412	Harmful to aquatic life with long lasting effects			
H319	Causes serious eye irritation			
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled			
Precautionary Statement(s)				
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.			
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.			
P273	Avoid release to the environment.			
P301+P312+P33	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.			
P304 + P340	IF INHALED: Remove person to fresh air and Keep comfortable for breathing.			
P312	Call a POISON CENTER or doctor/physician if you feel unwell.			
P280	Wear protective gloves/protective clothing/eye protection/face protection.			
P305+P351+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
P337 + P313	IF eye irritation persists: Get medical advice/attention.			
P342 + P311	IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.			
Other Hazards				

None

2.3

### 3 Composition/Information On Ingredients

#### 3.2 Mixture

Component		Classification	Concentration
Guanidine hydrochlor	ride, For Molecul	lar Biology	
CAS No. :	50-01-1	As Per EC Regulation 1272/2008	>=25 - <=50%
EC No. :	200-002-3	Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit.	
Molecular Formula :	CH₅N₃.HCl	2A H302; H315; H319	
Molecular Weight :	95.53		
-			

Component		Classification	Concentration
Lauryl sulphate sodium salt, For Molecular Biology			
CAS No. :	151-21-3	As Per EC Regulation 1272/2008	>=5 - <=10%

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EC No. :	205-788-1	Flam. Sol. 1; Acute Tox.oral 4; Acute	
Molecular Formula :	$C_{12}H_{25}NaO_4S$	Tox. dermal. 3; Skin Irrit. 2; Eye Dam. 1;	
Molecular Weight :	288.38	STOT SE 3 H228; H302; H311; H315;	
		H318; H335	

Compoi	nent	Classification	Concentration
Proteinase K, From Pichia pastoris, For Molecular Biology			
CAS No. :	39450-01-6	As Per EC Regulation 1272/2008	>=95 - <=100%
EC No. :	254-457-8	Skin Irrit. 2; Eye Irrit. 2A; Resp. Sens. 1;	
Index-No :	647-014-00-9	STOT SE 3 H315; H319; H334; H335	
Molecular Weight :	28.93 kDa		

#### 4 First Aid Measures

#### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash with plenty of soap and water. Consult a physician.

#### In case of eye contact

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

# **4.3** Indication of immediate medical attention and special treatment needed Treat symptomatically.

#### 5 Fire Fighting Measures

#### 5.1 Extinguishing media

Suitable extinguishing media Use water spray, alcohol- resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media

No data available.

**5.2** Special hazards arising from the substance or mixture No data available.

# 5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary

## 5.4 Further information

6	Accidental Release Measures
6.1	Personal precautions, protective equipment and emergency procedures
	Wear respiratory protection. Avoid breathing vapours, mist or gas. Wear disposable gloves, dust
	mask and eye protection.
6.2	Environmental precautions
	No special environmental precautions required.
6.3	Methods and materials for containment and cleaning up
	Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed
	containers for disposal. Clean up affected area. Flush spill area with water.
6.4	Reference to other sections
	For disposal see Section 13.
7	Handling and Storage
7.1	Precautions for safe handling
	For precautions see section 2.2.
7.2	Conditions for safe storage, including any incompatibilities
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which
	are opened must be carefully resealed and kept upright to prevent leakage.
	Recommended Storage Temperature : Store between 15-25°C
7.3	Specific end uses
	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
8	Exposure Controls/Personal Protection
8.1	Control parameters
	Components with workplace control parameters
8.2	Exposure controls
	Appropriate engineering controls
	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after
	handling the products.
	Personal protective equipment
	Hygiene measure
	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face
	after working with the product.
	Eye/face protection
	Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested
	and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
	Skin protection
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique
	(without touching glove's outer surface) to avoid skin contact with this product. Dispose
	contaminated gloves after use in accordance with applicable laws and good laboratory practices.
	Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive
	89/686/EEC and the standard EN 374 derived from it.
	Body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. *Respiratory protection* 

# Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Environment exposure controls

No special environmental precautions required.

#### 9 Physical and chemical properties

# 9.1 Information on basic physical and chemical properties Odour No

**Odour Threshold** pН Melting/freezing point Initial boiling point and boiling range Flash point Upper/lower flammability or explosive limits **Evaporation rate** Flammability (Solid, gas) Vapour pressure **Relative density** Water Solubility Partition coefficient: n-octanol/water Autoignition Temperature **Decomposition Temperature** Viscosity Vapour density Thermal decomposition

No data available No data available

#### 9.2 Other safety information

No data available

10	Stability and Reactivity
10.1	Reactivity
	No data available
10.2	Chemical stability
	Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions
	No data available
10.4	Conditions to avoid
	No data available
10.5	Incompatible materials
	No data available
10.6	Hazardous decomposition products

Other Decomposition products. No Data Available

11 Toxicological Information

11.1

Information on toxicological effects Acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity No data available Specific target organ toxicity- single exposure No data available

Aspiration hazard No data available Potential Health Effects Inhalation REFER SECTION 2 Skin REFER SECTION 2 Eyes REFER SECTION 2 Ingestion REFER SECTION 2 Additional Information RTECS : Not applicable

#### 12 Ecological Information

# 12.1 Toxicity

No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil

No data available

- **12.5 PBT and vPvB assessment** No data available
- **12.6** Other adverse effects No data available
- **13** Disposal Considerations
- 13.1 Waste treatments methods
   Product
   Offer surplus and non- recyclable solutions to a licenced company.
- **13.2** Contaminated packaging Dispose of as unused product.

14	Transport Information			
14.1	UN-No			
	ADNR : ADR : IATA_C : IAT	A_P : IMDG : RID :		
14.2				
	ADNR : Not dan	gerous goods		
		gerous goods		
	IATA_C : Not dan	gerous goods		
	IATA_P : Not dan	gerous goods		
	IMDG : Not dan	gerous goods		
	RID : Not dan	gerous goods		
14.3	Transport hazard class(es)			
	ADNR:-ADR:-IATA_C:-	IATA_P : - IMDG : - RID : -		
14.4	Packaging group			
	ADNR : ADR :	IATA C : IATA P : IMDG : RID :		
14.5	5 Environmental hazards			
	ADNR : No ADR : No IMDG : Marine Pollutant : No IATA_C : No IATA_P : No RID : No			
14.6				
	No data available			
15	<b>Regulatory Information</b>			
15.1	Safety health and environme	nt regulations/legislation specific for the substance or		
	mixture			
	No data available			
15.2	<b>Chemical Safety Assessment</b>			
	No data available			
16	Other information			
	H228	Flammable solid		
	H302	Harmful if swallowed		

H311	Toxic in contact with skin
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
Acute Tox. dermal. 3	Acute toxicity, dermal, Category 3
Acute Tox.oral 4	Acute toxicity, oral, Category 4
Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Flam. Sol. 1	Flammable solids, Category 1
Resp. Sens. 1	Sensitisation, respiratory, Category 1
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

#### **Further Information**

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