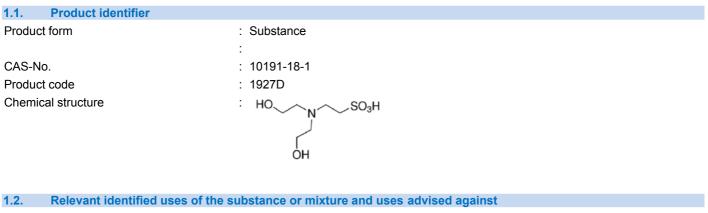




### **MATERIAL SAFETY DATA SHEET (MSDS)**

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



### 1.2.1. Relevant identified uses

Industrial/Professional use spec

: Industrial For professional use only

### 1.2.2. Uses advised against

No additional information available

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

Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar , Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com

### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Serious eye damage/eye H319 irritation, Category 2 Skin corrosion/irritation, H315 Category 2 Specific target organ H335 toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

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### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/37/38 Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements			
Labelling according to Regulation (EC) No. 1272/2008 [CLP]			
Hazard pictograms (CLP)	: GHS07		
Signal word (CLP)	: Warning		
Hazard statements (CLP)	<ul> <li>H315 - Causes skin irritation.</li> <li>H319 - Causes serious eye irritation.</li> <li>H335 - May cause respiratory irritation.</li> </ul>		
Precautionary statements (CLP)	<ul> <li>P261 - Avoid breathing vapours, dust, fume, gas.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> </ul>		

### 2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients		
3.1.	Substances	
Name		: BES BUFFER FOR BIOCHEMISTRY
CAS-No	).	: 10191-18-1

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

### 3.2. Mixtures

Not applicable

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. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of water/ Wash contaminated clothing before reuse. Get medical advice/attention.

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First-aid	measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid	measures after ingestion	: Rinse mouth. Do not induce vomiting.
4.2.	Most important symptoms and ef	fects, both acute and delayed
Sympton	ms/effects after inhalation	: May cause respiratory irritation.
Sympton	ms/effects after skin contact	: Causes skin irritation.
Sympton	ms/effects after eye contact	: Causes serious eye irritation.
4.3.	Indication of any immediate medi	cal attention and special treatment needed
Treat sy	mptomatically.	
SECTIO	N 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable	extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuital	ble extinguishing media	: Do not use a heavy water stream.
5.2. No addit	Special hazards arising from the ional information available	substance or mixture
5.3.	Advice for firefighters	
Protectio	on during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTIO	N 6: Accidental release measures	
6.1.	Personal precautions protective	equipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerge	ncy procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protectiv	ve equipment	: Use personal protective equipment as required.
Emerge	ncy procedures	: Ventilate area.
6.2.	Environmental precautions	
Avoid re	lease to the environment.	
6.3.	Methods and material for contain	ment and cleaning up
Methods		: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.
6.4.	Reference to other sections	
No addit	ional information available	
SECTIO	N 7: Handling and storage	
7.1.	Precautions for safe handling	
	· · · · · · · · · · · · · · · · · · ·	: Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours.
Hygiene	emeasures	<ul> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.</li> </ul>
7.2.	Conditions for safe storage, inclu	iding any incompatibilities
Storage		: Keep container tightly closed. Store in a well-ventilated place.
7.3.	Specific end use(s)	
No addit	ional information available	

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### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

8.2. Exposure controls	
Hand protection	: Protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.
SECTION 9: Physical and chemical prop	
9.1. Information on basic physical a Physical state	nd chemical properties : Solid
Molecular mass	: 213.25 g/mol
Colour	: White powder.
Odour	: No data available
Odour threshold	: No data available
pH	: 2.5 - 5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 152 - 154 °C
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 (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: 213.3 g/l at 20 °C
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available

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Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information No additional information available		
SECTION 10: Stability and reactivity		
10.1. Reactivity		
No additional information available		
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous rea	actions	
No additional information available		
10.4. Conditions to avoid		
Air contact. Direct sunlight. Moisture.		
10.5. Incompatible materials		
No additional information available		
10.6. Hazardous decomposition	products	
No additional information available		
SECTION 11: Toxicological informat	tion	
SECTION 11: Toxicological informat	Il effects	
11.1. Information on toxicologica	Il effects	
<b>11.1.</b> Information on toxicologica Acute toxicity	Il effects : Not classified	
11.1. Information on toxicologica	Il effects	
<b>11.1.</b> Information on toxicologica Acute toxicity	il effects : Not classified : Causes skin irritation.	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation	<ul> <li>il effects</li> <li>: Not classified</li> <li>: Causes skin irritation. pH: 2.5 - 5</li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> </ul> </li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation	<ul> <li>i Providence in the second s</li></ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation	<ul> <li>i Provide the second state of the sec</li></ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> <li>pH: 2.5 - 5</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> </li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> <li>pH: 2.5 - 5</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> </li> <li>I Not classified</li> <li>I Not classified</li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> <li>pH: 2.5 - 5</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> </li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> <li>pH: 2.5 - 5</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> </li> <li>I Not classified</li> <li>I Not classified</li> </ul>	
<b>11.1.</b> Information on toxicological         Acute toxicity         Skin corrosion/irritation         Serious eye damage/irritation         Respiratory or skin sensitisation         Germ cell mutagenicity         Carcinogenicity         Reproductive toxicity         STOT-single exposure	<ul> <li>I effects <ul> <li>Not classified</li> </ul> </li> <li>Causes skin irritation. <ul> <li>pH: 2.5 - 5</li> <li>Causes serious eye irritation.</li> <li>pH: 2.5 - 5</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> </li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>May cause respiratory irritation.</li> </ul>	

SECTION 12: Ecological information		
12.1. Toxicity		
No additional information available		
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12.2. Persistence and degradability	1
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB asso	ossmant
No additional information available	cosment
12.6. Other adverse effects	
No additional information available	
<b>SECTION 13: Disposal considerations</b>	
10.4	
13.1. Waste treatment methods	
No additional information available	
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / I/	
In accordance with ADR / RiD / IMDG / I/	RTA / ADN
14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (ADR) UN-No. (IMDG)	: Not applicable : Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IMDG) UN-No. (IATA)	: Not applicable : Not applicable
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN)	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA)	: Not applicable : Not applicable
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) 14.2. UN proper shipping name	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR)	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b>	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b>	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b>	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR) <b>IMDG</b>	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR) <b>IMDG</b> Transport hazard class(es) (IMDG)	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR) <b>IMDG</b> Transport hazard class(es) (IMDG) <b>IATA</b>	<ul> <li>Not applicable</li> </ul>
UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (ADN) UN-No. (RID) <b>14.2. UN proper shipping name</b> Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) <b>14.3. Transport hazard class(es)</b> <b>ADR</b> Transport hazard class(es) (ADR) <b>IMDG</b> Transport hazard class(es) (IMDG)	<ul> <li>Not applicable</li> </ul>

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ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

#### 14.6. Special precautions for user

### - Overland transport

No data available

### - Transport by sea

No data available

#### - Air transport

No data available

- Inland waterway transport

No data available

### - Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### 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

No REACH Annex XVII restrictions

BES BUFFER FOR BIOCHEMISTRY is not on the REACH Candidate List BES BUFFER FOR BIOCHEMISTRY is not on the REACH Annex XIV List

### 15.1.2. National regulations

#### Germany

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12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BImSchV

### Netherlands

SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen	-	The substance is not listed The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	The substance is not listed
Denmark		
Recommendations Danish Regulation	:	Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

### **SECTION 16: Other information**

### Full text of R-, H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
R36/37/38	Irritating to eyes, respiratory system and skin	
Xi	Irritant	

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