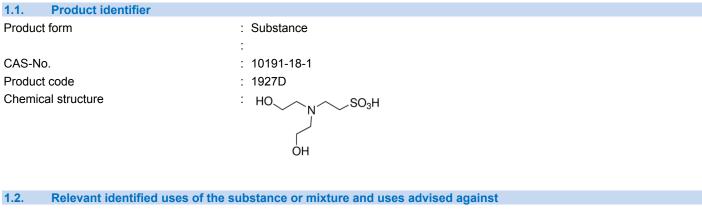


CAS-No.: 10191-18-1 MSDS

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

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai - INDIA T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (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

Safety Data Sheet

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

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients		
3.1.	Substances	
Name	: BES BUFFER FOR BIOCHEMISTRY	
CAS-No	p. : 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.

Safety Data Sheet

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 e	ffects, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
	ical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measures	
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions Avoid release to the environment.	
6.3. Methods and material for contain	ment and cleaning up
Methods for cleaning up	: 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 additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do
	not breathe vapours.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, inclu	uding any incompatibilities
Storage conditions	: Keep container tightly closed. Store in a well-ventilated place.
7.3. Specific end use(s)	
No additional information available	

Safety Data Sheet

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 properties	
9.1. Information on basic physical a Physical state	nd chemical properties : Solid
Molecular mass Colour	: 213.25 g/mol : White powder.
Odour	: No data available
Odour threshold	: No data available
рН	: 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

Safety Data Sheet

Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		
No additional information available		
SECTION 10: Stability and reactivity	y .	
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 informa	tion	
SECTION 11: Toxicological information on toxicological		
11.1. Information on toxicologica	al effects	
11.1. Information on toxicologica Acute toxicity	al effects : Not classified	
11.1. Information on toxicologica	al effects : Not classified : Causes skin irritation.	
11.1. Information on toxicologica Acute toxicity	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation	al effects : Not classified : Causes skin irritation.	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation.	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation. pH: 2.5 - 5	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation. pH: 2.5 - 5 : Not classified	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 al effects Not classified Causes skin irritation. pH: 2.5 - 5 Causes serious eye irritation. pH: 2.5 - 5 Not classified Not classified Not classified 	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation. pH: 2.5 - 5 : Not classified : Not classified	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation. pH: 2.5 - 5 : Not classified : Not classified : Not classified : Not classified	
11.1. Information on toxicological Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	al effects : Not classified : Causes skin irritation. pH: 2.5 - 5 : Causes serious eye irritation. pH: 2.5 - 5 : Not classified : Not classified : Not classified : Not classified	
 11.1. 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 	 al effects Not classified Causes skin irritation. pH: 2.5 - 5 Causes serious eye irritation. pH: 2.5 - 5 Not classified Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation. 	
11.1. 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 STOT-repeated exposure	 al effects Not classified Causes skin irritation. pH: 2.5 - 5 Causes serious eye irritation. pH: 2.5 - 5 Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation. Not classified 	

SECTION 12: Ecological information		
12.1. Toxicity		
No additional information available		
www.lobachemie.com	21/12/2018	5/8

Safety Data Sheet

12.2. Persistence and degradabilit		
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 ass	essment	
No additional information available		
12.6. Other adverse effects		
No additional information available		
SECTION 13: Disposal consideration		
13.1. Waste treatment methods		
No additional information available		
SECTION 14: Transport information		
In accordance with ADR / RID / IMDG /	ATA / ADN	
14.1. UN number		
UN-No. (ADR)	: Not applicable	
UN-No. (IMDG)	: Not applicable	
UN-No. (IATA)	: Not applicable	
UN-No. (ADN)	: Not applicable	
UN-No. (RID)	: Not applicable	
14.2. UN proper shipping name		
Proper Shipping Name (ADR)	: Not applicable	
Proper Shipping Name (IMDG)	: Not applicable	
Proper Shipping Name (IATA)	: Not applicable	
Proper Shipping Name (ADN)	: Not applicable	
Proper Shipping Name (RID)	: Not applicable	
14.3. Transport hazard class(es)		
ADR		
Transport hazard class(es) (ADR)	: Not applicable	
IMDG		
Transport hazard class(es) (IMDG)	: Not applicable	
ΙΑΤΑ		
Transport hazard class(es) (IATA)	: Not applicable	
	••	

Safety Data Sheet

•	
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

www.lobachemie.com

Safety Data Sheet

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

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed	
SZW-lijst van mutagene stoffen	:	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			
Deninark			
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