

MATERIAL SAFETY DATA SHEET (MSDS)

MOPS (BIOLOGICAL BUFFER) MORPHOLINO PROPANE SULPHONIC ACID

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier		
Trade name	: MOPS (BIOLOGICAL BUFFER) MORPHOLINO PROPANE SULPHONIC ACID	
Product code	: M0139700100	
Identification of the product	: MORPHOLINOPROPANE SULFONIC ACID (MOPS) 99% (Bio-Bu	
	CAS No: 1132-61-2	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
Use	: Industrial. For professional use only.	
1.3. Details of the supplier of the safety data sheet		
Company identification	SUVCHEM Chaitanya Tower, 2nd Floor, Office # 206, Siddharth Nagar, S.V. Road, Goregaon (West), Mumbai - 400062, Maharashtra, India. Contact: +91 22 28725393 / 94 / 95	
	Email ID: info@suvchem.com/care@suvchem.com	
<u>1.4. Emergency telephone number</u>	Email ID: info@suvchem.com/care@suvchem.com	

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification	: Xi; R36/37/38
Hazard Class and Category	<pre>/ Code(s), Regulation (EC) No 1272/2008 (CLP)</pre>
Health hazards	: Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation - Category 3 - Warning (CLP : STOT SE 3) H335 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315 Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302

Labelling EC 67/548 or EC 1999/45

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2. Hazards identification -DSD (continued)

Symbol(s)



Symbol(s) R Phrase(s) S Phrase(s)	 Xi : Irritant R36/37/38 : Irritating to eyes, respiratory system and skin. S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 : Wear suitable protective clothing.
Labelling Regulation EC 1272/2008 (C	<u>LP)</u>
Hazard pictograms	
Signal words	: Warning
Hazard statements	 H302 : Harmful if swallowed. H319 : Causes serious eye irritation. H315 : Causes skin irritation. H335 : May cause respiratory irritation.
Precautionary statements	
Prevention	 P280: Wear protective gloves, protective clothing, eye protection, face protection. P271: Use only outdoors or in a well-ventilated area. P261: Avoid breathing dust, fume, gas, mist, vapours, spray. P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product.
• Response	 P302+P352: IF ON SKIN : Wash with plenty of soap and water. P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell. P332+P313: If skin irritation occurs : Get medical advice. P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing. P363: Wash contaminated clothing before reuse.
Storage	: P403+P233: Store in well-ventilated place. Keep container tightly closed. P405: Store locked up.
 Disposal considerations 	: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
2.3. Other hazards	
Other hazards	: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.



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3. Composition/information on ingre	edients	
Substance / Preparation	: MORPHOLINOPROPANE SULFONIC ACID (MOPS) 99% (Bio-Bu	
Contains no other components or impu	Substance. rities which will influence the classification of the product.	
4. First aid measures		
4.1. Description of first aid measures	<u>2</u>	
Inhalation	: Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.	
Skin contact	: Specific treatment (see on this label). Get medical advice. If skin irritation occurs : Wash with plenty of soap and water. Wash contaminated clothing before reuse.	
Eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists : Get medical advice.	
Ingestion	: Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.	
4.2. Most important symptoms and e	ffects, both acute and delayed	
Symptoms relating to use	: Swallowing a small quantity of this material will result in serious health hazard. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.	
4.3. Indication of any immediate medical attention and special treatment needed		
General information	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).	
5. Fire-fighting measures		
5.1. Extinguishing media		

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
Surrounding fires	: Use water spray or fog for cooling exposed containers.
5.2. Special hazards arising from the substance or mixture	
Hazardous combustion products	: Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters



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5. Fire-fighting measures (continued)		
Protection against fire	: Do not enter fire area without proper protective equipment, including respiratory protection.	
Special procedures	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.	
6. Accidental release measures		
6.1. Personal precautions, protective	equipment and emergency procedures	
For emergency responders	: Equip cleanup crew with proper protection. Ventilate area.	
For non-emergency personnel	: Evacuate unnecessary personnel.	
6.2. Environmental precautions		
Environmental precautions	: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.	
6.3. Methods and material for contair	6.3. Methods and material for containment and cleaning up	
Clean up methods	: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.	
6.4. Reference to other sections		
See section 8. Exposure controls/perso	nal protection	

7.	Handling	and	storage

7.1. Precautions for safe handling

Handling	: Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.	
Technical protective measures	: Provide good ventilation in process area to prevent formation of vapour.	
Special precautions	: Avoid breathing dust, fume, gas, mist, vapours, spray.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage	: Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.	
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.	
<u>7.3. Specific end use(s)</u>		



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Specific end use(s)

: None.

8. Exposure controls/personal protection

7. Handling and storage (continued)

8.1. Exposure controls

Personal protection	: Avoid all unnecessary exposure.
 Respiratory protection 	: Wear approved mask.
 Hand protection 	: Wear protective gloves.
 Skin protection 	: Wear suitable protective clothing.
Eye protection	: Chemical goggles or safety glasses.
Others	: When using, do not eat, drink or smoke.
8.2. Control parameters	

: No data available.

9. Physical and chemical properties

Occupational Exposure Limits

9.1. Information on basic physical and chemical properties

Physical state at 20 °C Colour Odour Odour threshold pH value Melting point [°C] Decomposition point [°C] Critical temperature [°C] Critical temperature [°C] Auto-ignition temperature [°C] Flammability (solid, gas) Flash point [°C] Boiling point [°C] Initial boiling point [°C] Final boiling point [°C] Evaporation rate Vapour pressure [20°C]	: Solid. : White crystalline : Odorless : No data available. : Not applicable. : 277 °C : N/A : N/A
Vapour pressure mm/Hg Vapour density	: N/A : N/A



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9. Physical and chemical properties (continued)

Density [g/cm3] Relative density, gas (air=1) Relative density, liquid (water=1) Solubility in water [% weight] Solubility in water Log Pow octanol / water at 20°C Solubility Viscosity at 40°C [mm2/s] <u>9.2. Other information</u>	: N/A : N/A : 209 g/l at 20 °C - c : N/A : No data available. : 2.5 - 4 at 209 g/l a : N/A
Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity

10.1. Reactivity		
Reactivity	: Not established.	
10.2. Chemical stability		
Chemical stability	: Stable under recommended storage conditions.	
10.3. Possibility of hazardous reactions		
Hazardous reactions	: Not established.	
10.4. Conditions to avoid		
Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.	
10.5. Incompatible materials		
Materials to avoid	: Strong acids. Strong bases.	
10.6. Hazardous decomposition products		
Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.	



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11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	
Inhalation	: Based on available data, the classification criteria are not met.
• Dermal	: Based on available data, the classification criteria are not met.
 Ingestion 	: Harmful if swallowed.
Corrosion	: Based on available data, the classification criteria are not met.
Irritation	: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.
Sensitization	: Based on available data, the classification criteria are not met.
Mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Toxic for reproduction	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.

12. Ecological information

<u>12.1. Toxicity</u>		
Toxicity information	: Not established.	
<u> 12.2. Persistence - degradability</u>		
Persistence - degradability	: Biodegradable.	
12.3. Bioaccumulative potential		
Bioaccumulative potential	: Not established.	
<u>12.4. Mobility in soil</u>		
Mobility in soil	: Not established.	
12.5. Results of PBT and vPvB assessment		
Results of PBT and vPvB assessme	ent : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.	
12.6. Other adverse effects		

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12. Ecological information (continued)		
Environmental precautions	: Avoid release to the environment.	
13. Disposal considerations		
13.1. Waste treatment methods		
General	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.	
14. Transport information		
14.1. Land transport (ADR-RID)		
General information	: Not regulated.	
14.2. Sea transport (IMDG) [English only]		
General information	: Not regulated.	
14.3. Air transport (ICAO-IATA) [English only]		
General information	: Not regulated.	
15. Regulatory information		
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
Safety, health and environmental Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture		

REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.
15.2. Chemical Safety Assessment	

Chemical Safety Assessment : It has not been carried out.



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In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- SUVCHEM provides the information contained herein in good faith but makes no representation as to its
 comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of
 the material by a properly trained person using this product.

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