

MATERIAL SAFETY DATA SHEET (MSDS)

ETHIDIUM BROMIDE SOLUTION ~1% IN WATER (FOR FLUORESCENCE)

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

1.1. Product identifier	
Trade name	: ETHIDIUM BROMIDE SOLUTION ~1% IN WATER (FOR FLUORESCENCE)
Product code	: SI0304000050 Cas No:1239-45-8
1.2. Relevant identified uses of the su	bstance or mixture and uses advised against
Use	: Industrial. For professional use only.
1.3. Details of the supplier of the safe	ty 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
1.4. Emergency telephone number	
Phone no.	: + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/4	
Classification	: T; R23
Hazard Class and Category Code(s), R	egulation (EC) No 1272/2008 (CLP)
Health hazards	: Specific Target Organ Toxicity - Single exposure - Category 2 - Warning (CLP : STOT SE 2) H371 Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
2.2. Label elements	
Labelling EC 67/548 or EC 1999/45	
Symbol(s)	



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Hazards identification -DSD (continued)
Symbol(s)	: T : Toxic
R Phrase(s)	: R23 : Toxic by inhalation. R68 : Possible risks of irreversible effects.
S Phrase(s)	: S36/37 : Wear suitable protective clothing and gloves. S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
Contains	: Pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate
Labelling Regulation EC 1272/20	<u>008 (CLP)</u>
Hazard pictograms	
Signal words	: Danger
Hazard statements	:H331:Toxic if inhaled. H371:May cause damage to organs.
Precautionary statements	
Prevention	 P271: Use only outdoors or in a well-ventilated area. P260: Do not breathe dust, fume, gas, mist, vapours, spray. P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product.
Response	 P309+P311: IF exposed or if you feel unwell : Call a POISON CENTER or doctor. P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
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. 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.
Contains	: Pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate
2.3. Other hazards	
Other hazards	: The substance does not fulfil the criteria to be identified as PBT substance or vPv substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients						
Substance / Preparation	: Pre	paration.				
Substance name Pentasodium (carboxylatomethyl) : iminobis(ethylenenitrilo) tetraacetate	Contents	CAS No 583-61-9	EC No 209-514-1	Annex No	REACH Ref.	Classification R10 Xn; R22 Xi; R37/38-41



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3. Composition/information on ingredients (continued)

Eye Dam 1 _ H318 Flam. Sol. 2 _ H228 Acute Tox. 4 (oral) _ H302 Skin Irrit. 2 _ H315 STOT SE 3 _ H335

4. First aid measures

4.1. Description of first aid measures	
Inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.
Skin contact	: Wash with plenty of soap and water.
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	: Rinse mouth. Do NOT induce vomiting.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms relating to use	: Danger of serious damage to health by prolonged exposure through inhalation. May cause damage to organs.
4.3. Indication of any immediate medi	cal 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 Unsuitable extinguishing media Surrounding fires	: Foam. Dry powder. Carbon dioxide. Water spray. Sand. : Do not use a heavy water stream. : 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	
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.



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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders	: Equip cleanup crew with proper protection. Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.
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 containing	ment and cleaning up
Clean up methods	: On land, sweep or shovel into suitable containers. Store away from other materials.
6.4. Reference to other sections	

See section 8. Exposure controls/personal protection

7. Handling and storage 7.1. Precautions for safe handling **Personal protection** : Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. : Wash hands and other exposed areas with mild soap and water before eat, drink or Handling smoke and when leaving work. Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a well-ventilated area. : Provide good ventilation in process area to prevent formation of vapour. **Technical protective measures** 7.2. Conditions for safe storage, including any incompatibilities : Keep only in the original container in a cool, well ventilated place. Keep container Storage tightly closed. : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Storage - away from 7.3. Specific end use(s) : None. Specific end use(s)



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8. Exposure controls/personal protection				
8.1. Exposure controls				
Personal protection	: Avoid all unnecessary exposure.			
 Respiratory protection 	 In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 			
 Hand protection 	: Wear protective gloves.			
Eye protection	: Chemical goggles or safety glasses.			
Others	: When using, do not eat, drink or smoke.			
8.2. Control parameters				
Occupational Exposure Limits	: No data available.			

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid.
Colour	: Dark red coloured solution
Odour	: Odorless
Odour threshold	: No data available.
pH value	: Not applicable.
Melting point [°C]	: No data available.
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: N/A
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm3]	: N/A
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A



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9. Physical and chemical properties (continued)

Solubility in water [% weight]: N/ASolubility in water: N/ALog Pow octanol / water at 20°C: No data availableSolubility: N/A	
Viscosity at 40°C [mm2/s]	: N/A
9.2. Other information	
Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity

<u>10.1. Reactivity</u>	
Reactivity	: Not established.
10.2. Chemical stability	
Chemical stability	: Stable under recommended storage conditions.
10.3. Possibility of hazardous reactio	<u>ns</u>
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 prod	ucts
Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects



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1. Toxicological information (continued)			
Toxicity information	: The product has been not fully tested. The calculated risk has been done under th requirements of the EU regulations.		
Acute toxicity			
Inhalation	: Toxic if inhaled.		
• Dermal	: Based on available data, the classification criteria are not met.		
Ingestion	: Based on available data, the classification criteria are not met.		
Corrosion	: Based on available data, the classification criteria are not met.		
Irritation	: Based on available data, the classification criteria are not met.		
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	: Causes damage to organ. Causes damage to organ.		
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	: The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.	
<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 assessmer	It : 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.	
Special precautions	: Hazardous waste due to toxicity.	
14. Transport information		
14.1. Land transport (ADR-RID)		
Proper shipping name UN N° H.I. nr ADR - Class Labelling - Transport	: TOXIC LIQUID, ORGANIC, N.O.S. : 2810 : 60 : 6.1 : 6.1 : Toxic substances.	
ADR - Classification code	: T1 T1	
ADR - Group ADR - Packing instructions ADR - Limited Quantity ADR - Tunnel code	: III : P001 R001 LP001 : 5 L	
14.2 See transport (IMDC) [Enalis)	: E : Passage forbidden through tunnels of category E.	
14.2. Sea transport (IMDG) [Englis		
Proper shipping name	: TOXIC LIQUID, ORGANIC, N.O.S.	

: 2810

UN N°



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14. Transport information (continued)

IMO-IMDG - Class or division	: 6.1 : Toxic substances.
IMO-IMDG - Packing group	: 111
IMO- IMDG - Packing instructions	: P001 LP01
IMO-IMDG - Limited quantities	: 5 L
IMO-IMDG - Marine pollution	: No
EMS-Nr	: F-A S-A

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name	: TOXIC LIQUID, ORGANIC, N.O.S.
UN N°	: 2810
IATA - Class or division	: 6.1 : Toxic substances.
IATA - Packing group	: 111
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 655
- Passenger and Cargo - Maximum Quantity/Packing	: 60 L
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 663
- Cargo only - Maximum Quantity/ Packing	: 220 L
IATA - Limited Quantites	: 2 L
ERG-Nr	: 6L

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for th substance or mixture	: Ensure all national/local regulations are observed.
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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