OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599 Email : info@ottokemi.com, Web : www.ottokemi.com

-----ISO 9001: 2015------

MATERIAL SAFETY DATA SHEET

SECTION 1 Product identifiers

Product name: Dimidium bromide disulphine blue, indicator stock, solution

Product Code: D 2146

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

No labelling applicable 2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name: DIMIDIUM BROMIDE DISULPHINE BLUE INDICATOR STOCK SOLUTION

Name Product identifier %

Name	Product identifier	%
Water	(CAS-No.) 7732-18-5	90 - 93
	(EC-No.) 231-791-2	
Ethanol	(CAS-No.) 64-17-5	10 - 11
	(EC-No.) 200-578-6	
	(EC Index-No.) 603-002-00-5	
DIMIDIUM BROMIDE	(CAS-No.) 518-67-2	0.1 - 0.5
PATENT BLUE V C.I.No.42045	(CAS-No.) 3536-49-0	0.1 - 0.2

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: Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact: Wash with plenty of water/.... Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

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. Get medical advice/attention.

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

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray. Foam. Dry powder. Carbon dioxide.

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 containment 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. Do not breathe vapours.

Hygiene measures : Always wash hands after handling the product. 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

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 and chemical properties

Physical state: Liquid

Colour: Blue coloured solution. Odour : No data available Odour threshold: No data available

pH : No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point : No data available 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: No data available Log Pow : No data available

Viscosity, kinematic: No data available Viscosity, dynamic : No data available Explosive properties : No data available 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 reactions

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

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

DIMIDIUM BROMIDE

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / 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

IATA

Transport hazard class(es) (IATA): Not applicable 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 Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

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

DIMIDIUM BROMIDE DISULPHINE BLUE INDICATOR STOCK SOLUTION is not on the REACH Candidate List DIMIDIUM BROMIDE DISULPHINE BLUE INDICATOR STOCK SOLUTION is not on the REACH Annex XIV List 15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

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

15.2. Chemical safety assessment

No additional information available

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.