Material Safety Data Sheet

Methylene Blue Solution (RXSOL-60-6189-100)

1. Product and Company Identifaction

Product Name	RXSOL-60-6189-100
Product Type	Methylene Blue Solution 1 ml = 0.01 ME

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Chennai, Kolkata, Visakhapatnam, Fujairah

Phone	+91 22 27815541 / 42
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Mixture

Name	Product Identifier	% (w/w)	GHS-US classification
Methylene blue trihydrate	(CAS No.) 7220-79-3	1%	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 1B, H360
Water	(CAS No.) 7732-18-5	99%	Not classified

3. Hazards Identification

Classification Of The Substance Or Mixture

GHS-US classification
Repr. 1B H360

Label Elements

GHS-US labeling
Hazard pictograms (GHS-US) : GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H360 – May damage fertility or the unborn child

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear eye protection, face protection, protective gloves, protective clothing.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards Not available

Unknown acute toxicity (GHS US) Not available

4. First Aid Measures

Description Of First Aid Measures

General: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: If skin irritation occurs: Get medical advice/attention.

Eye Contact: IF IN EYES: 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. Obtain emergency medical attention.

Most Important Symptoms And Effects Both Acute and Delayed

General: May damage fertility or the unborn child

Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Gastrointestinal irritation.

Chronic symptoms: Ingestion of large amounts of methylene blue trihydrate may cause hemolytic anemia.

Indication Of Any Immediate Medical Attention And Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting Measures

Extinguishing Media

Suitable extinguishing media: Foam, dry powder, carbon dioxide, water spray, sand. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Do not use a heavy water stream.

Special Hazards Arising From The Substance Or Mixture

Fire hazard: Not considered flammable but may burn at high temperatures.

Explosion hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice For Firefighters

Precautionary measures fire: Not available

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Highly toxic and corrosive gases are released, sulfur oxides, nitrogen oxides,carbon monoxide, carbon dioxide, chlorine gas, hydrogen chloride gas.

Reference To Other Sections

Refer to section 9 for flammability properties.

6. Accidental Release Measures

Personal Precautions, Protective Equipment And Emergency Procedures

General measures: Avoid all eye and skin contact and do not breathe vapour and mist.

For Non-Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods And Material For Containment And Cleaning Up

For containment : Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for cleaning up: Clear up spills immediately and dispose of waste safely.

Reference To Other Sections

See Heading 8, exposure controls and personal protection

7. Handling and Storage

Precautions For Safe Handling

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions For Safe Storage, Including Any Incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: ignition sources, incompatible materials, combustible materials. Keep container closed when not in use.

Specific End Use(s) Laboratory Reagent

8. Exposure controls and personal protection

Control Parameters

No Occupational Exposure Limits have been established for the product or its components.

Exposure Controls

Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Avoid all unnecessary exposure. Safety glasses, gloves, protective clothing.

Materials for protective clothing: Not available

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other information: When using, do not eat, drink or smoke.

9. Physical and chemical properties

Information On Basic Physical And Chemical Properties

Physical state	Liquid
Appearance	Clear, dark blue
Odour	Odourless

Odour threshold	Not available
pH	3 - 4.5
Relative evaporation rate (butylacetate=1)	1
Melting point	~ 0 °C (32°F)
Freezing point	Not available
Boiling point	~ 100 °C (212°F)
Flash point	Not available
Auto-ignition temperature	Not available
Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Lower flammable limit	Not available
Upper flammable limit	Not available
Vapour pressure	Not available
Relative vapor density at 20 °C	Not available
Relative density	Not available
Specific gravity density	1
Solubility	Water: Soluble
Log Pow	Not available
Log Kow	Not available
Viscosity, kinematic	Not available
Viscosity, dynamic	Not available
Explosion data - sensitivity to mechanical impact	Not available
Explosion data - sensitivity to static discharge	Not available

10. Stability and reactivity

Reactivity Hazardous reactions will not occur under normal conditions.

Chemical Stability Stable under normal conditions.

Possibility Of Hazardous Reactions Hazardous polymerization will not occur.

Conditions To Avoid Direct sunlight. Extremely high or low temperatures.

Incompatible Materials Strong acids, strong bases, strong oxidizers, reducing agents.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides, chlorine gas, hydrogen chloride gas.

11. Toxicological information

Information On Toxicological Effects - Product

Acute toxicity : Not classified

LD50 and LC50 Data Not available

Skin corrosion/irritation: Not classified pH: 3 - 4.5

Serious eye damage/irritation: Not classified, pH: 3 - 4.5

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Teratogenicity: May cause birth defects.

Carcinogenicity: Not classified

Specific target organ toxicity (repeated exposure): Not classified

Reproductive toxicity: May damage fertility or the unborn child.

Specific target organ toxicity (single exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact: May cause skin irritation.

Symptoms/injuries after eye contact: May cause eye irritation.

Symptoms/injuries after ingestion: Gastrointestinal irritation.

Chronic symptoms: Ingestion of large amounts of methylene blue trihydrate may cause hemolytic anemia.

Information On Toxicological Effects - Ingredient(s)

LD50 and LC50 Data Not available

Methylene blue trihydrate (7220-79-3)

National Toxicity Program (NTP) Status	1

12. Ecological information

Persistence And Degradability

Methylene Blue Solution 1ml = 0.01 ME

Persistence and degradability	Not established.

Bioaccumulative Potential

Methylene Blue Solution 1ml = 0.01 ME

Bioaccumulative potential	Not established.

Mobility In Soil Not available

Other Adverse Effects Avoid release to the environment.

13. Disposal considerations

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology - waste materials: Avoid release to the environment.

14. Transport information

In accordance with ICAO/IATA/DOT/TDG

UN Number Not regulated for transport

UN Proper Shipping Name Not regulated for transport

Additional information Not regulated for transport

Overland transport Not regulated for transport

Transport by sea Not regulated for transport

Air transport Not regulated for transport

15. Regulatory information

US Federal regulations

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations - The components of this product or the product as a whole do not appear on any US State regulatory lists.

Canadian regulations

Methylene Blue Solution 1ml = 0.01 ME

WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Sustances List) Inventory.

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

16. Other information

Indication of changes : Revision date 02/04/2013

Data sources : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Other information : None.

GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Repr. 1B	Reproductive toxicity Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2

H360

May damage fertility or the unborn child

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health : 4 Severe Hazard - Life-threatening, major or permanent damage may result from single or repeated overexposures

Flammability: 1 Slight Hazard

Physical : 0 Minimal Hazard

Party Responsible For The Preparation Of This Document:
OFI Testing Equipment

Phone Number: 832-320-7300

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.