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Material Safety Data Sheet

SPI #02573-AB/02573-MB SPI-Chem™ Methylene Blue

Section 01: Identification

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Date Effective... January 8, 2009
              (most recent revision)


Chemical Name/Synonyms...
        3,7-Bis(dimethylamino)phenothiazin-5-ium
                Chloride
        Basic Blue 9
        C.I. 52015

Chemical Family...  Not known
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Emergencies
Use Only #'s:

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Contacting CHEMTREC 24 Hour Emergency
Worldwide phone : 1-(703)-527-3887
Worldwide FAX   : 1-(703)-741-6090
Toll-free phone : 1-(800)-424-9300 USA only

Product or Trade Name....  SPI #02573-AB/02573-MB SPI-Chem™ Methylene
                                                              Blue

CAS #....................  7220-79-3

RTECS# SP5740000

EINECS No................  200-515-2

Chemical Formula.........  C16H18ClN3S.3H2O
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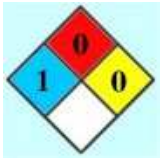
Hazardous Material Information System USA			National Fire Protection Association USA	
	Health	**1**		
	Fire Hazard	**0**		
	Reactivity	**0**		
	Personal Protection			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NFPA
(National Fire Protection Association)
Rating (Scale 0-4) : (estimated)
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Health 1 Flammability 0 Instability 0

Section 02: Composition information on Ingredients

Ingredient 1: Methylene Blue Stains Grade > 98%

Section 03: Hazards Identification

Emergency overview:
This material is not hazardous by OSHA Hazard Communication Definition.

Signal Word(s):
Harmful! Irritant!

Main Hazards:
Harmful by inhalation, in contact with skin, and if swallowed. Irritating to eyes, respiratory system and skin.

Physical Health Hazards:
Dry dust may form respirable particulates if disturbed.
If this material gets into the eyes, it could be irritating.
Material could be irritating if the dust is inhaled. Could also be irritating if skin is exposed to the dry powder.

Physical state: Solid

Color: dark green

Odor: None

Odor threshold: No data available

Potential Health Effects:

Routes of exposure:
Eye contact, ingestion, skin contact

Signs and Symptoms of Acute Exposure:
This material if used properly, should not pose any kind of real hazard. If the material is used improperly, for example, if the dust is inhaled, it could be very irritating to the respiratory tract.

Eye contact:
Mechanical irritation is possible; can be irritant.

Skin Contact:
There may be irritation and redness at the site of contact.

Ingestion:
May be harmful if swallowed. Nausea and stomach pain may occur. There may be vomiting and diarrhea. Headaches or general malaise may result. May cause blueness around the mouth.

Inhalation:
Exposure may cause coughing or wheezing. May cause blueness around the mouth. Nausea and stomach pain may occur.

Section 04: First Aid Measures

Take proper precautions to ensure your own health and safety before attempting to rescue and providing first aid. For specific information refer to the Emergency Overview in Section of this MSDS.

Symptoms:

Skin contact:
There may be irritation and redness at the site of contact. An itchy rash may occur at the site of contact.

Eye contact:

There may be irritation and redness.

Ingestion:
Nausea and stomach pain may occur. There may be vomiting.

Inhalation:
Nausea and stomach pain may occur.

Action:

Skin Contact:
Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin area with running water for ten minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye Contact:
Wash eyes with clean low-pressure water. Continue to rinse for 15 minutes. Seek medical advice for examination and possible further treatment of the affected eye(s).

Ingestion:
Do not induce vomiting. Wash out mouth with water. Seek emergency medical attention at once.

Inhalation:
Remove victim from further exposure ensuring your own safety first. If unconscious, and check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available.If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the victim sits or lies down. Seem medical attention at once.

Section 05: Fire Fighting Measures

Extinguishing Media:
Any suitable medium for extinguishing the supporting fire. Use water to keep fire-exposed containers cool. For fire specifically involving this product, use water spray, dry chemical powder, alcohol or polymer foam, or CO2 to extinguish the fire.

Exposure Hazards:
In combustion emits toxic fumes.

Protection of Fire-Fighters:

Protective Equipment/Clothing:
Wear a NIOSH approved positive pressure self-contained breathing apparatus and firefighter turnout gear. This should be selected on the basis of the supporting fire. Avoid having the fumes come in contact with skin and eyes.

Section 06: Accidental Release Measures

See Sections 8 and 13.

Personal precautions:
Do not attempt to take action without suitable protective clothing. Do not create dust so that there are air borne particulates that could be inhaled.

Environmental precautions:
Do not discharge into drains, rivers, or lakes.

Release response:
Pick up with dry cloth and retain for recycle or disposal. Do not flush spilled material to the sewer or the environment. Waste materials should be put into a labeled disposal container for disposal according to local regulations.

Section 07: Handling and Storage

Handling:
Use in well ventilated areas. Wear suitable gloves if prolonged exposure is contemplated. Avoid direct contact with the material.

Storage:
Store away from excessive heat and generally in a cool dry place. Keep container tightly closed. Keep away from direct sunlight. Avoid contact with water or humidity.

Section 08: Exposure Controls and Personal Protection

Engineering measures:
Ensure that there is mechanical ventilation of the area.

Respiratory protection:
Respiratory protective device with particle filter class P2S (EN143). Self-contained breathing apparatus must be available in case of emergency.

Hand protection:
Protective gloves

Eye protection:
Safety goggles. Ensure eye bath is readily available.

Skin protection:
Protective clothing with elastic cuffs and closed neck. Boots should be made of PVC.

The product does not present a significant hazard in normal laboratory use as a light microscope stain. The data provided above refer to prolonged contact with large quantities of product.

Section 09: Physical and Chemical Properties

Boiling Point/Range: Not applicable

pH: Not applicable

Vapor Pressure: Not known/not applicable

Viscosity: Not applicable

Specific Gravity:
Solid/Liquid Not known

Water solubility: Soluble
Ethanol solubility: Soluble

Octanol/Water Partition Coefficient in Kow: Specific value not known

Melting/Freezing Point: 190°C

Evaporation Rate: Not applicable

Odor: None

Appearance and Physical State: dark green solid

Section 10 Stability and Reactivity

Chemical Stability:
The product is stable under normal use conditions.

Conditions to Avoid:
Excessive heat, sunlight

Incompatibility (materials to avoid):
Strong oxidizing agents, Reducing agents, Bases, Chromates

Hazardous Products of Deposition:
In combustion, the material emits toxic fumes.

Section 11: Toxicological Information

Acute toxicity: Methylene Blue
Oral, Rat LD50: 1180 mg/kg

Section 12: Ecological Information

None available from our selected sources.

Section 13: Disposal Considerations

Waste disposal:
Arrange for collection by an approved hauler, following federal, state and local regulations.

Another option, assuming it is legal to do so where you are located:
Mix or dissolve the material with a combustible material and burn in a chemical incinerator equipped with afterburners and scrubbers.

Disposal of packaging:
Arrange for disposal following all federal, state, and local regulations. Clean first with water and the waste water should be discarded as a normal industrial waste, following all federal, state and local rules and regulations.

Section 14: Transport Information

This product is not classified as dangerous.

DOT Hazard Class: Non-Regulated

UN/NA ID: Not Regulated

Packing Group: Not Applicable

Labels: Not Regulated

Marine Pollutant: No

NAER Guidebook: Not Regulated

DOT Status: Not Regulated

Section 15: Regulatory Information

TSCA:
All components of this product are listed on the TSCA 8(b) inventory.
If identified components of this product are listed under the TSCA 12(b) Export Notification Rule, they will be listed below.

TSCA 12(b) Component	Listed under TSCA Section

SARA-Section 313 Emissions Reporting:

Component	Reporting Threshold

SARA-Section 311/312:
No components present in this product are subject to the reporting requirements of this statute.

CERCLA Hazardous Substances and their Reportable Quantities:

Component	Reportable Quantity

California Prop. 65:
Proposition 65 requires manufacturers or distributors of consumer products into the State of California to provide a warning statement the product contains ingredients for which the State has found to cause cancer, birth defects or other reproductive harm. If this product contains an ingredient listed by the State of California to cause cancer or reproductive toxicity, it will be listed below:

No components are found in this product.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: Xn,i

Risk Phrases:
R22 Harmful if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases:
S22 Do not breathe dust
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/38 Wear suitable protective clothing, gloves and eye/face protection

Canada:
CAS# 7220-79-3 is not on Canada's DSL list.
CAS# 7220-79-3 is not on Canada's NDSL list.
CAS# 7220-79-3 has a WHMIS of D2B.

Section 16: Additional Information

Disclaimer of Liability:
Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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