MATERIAL SAFETY DATA SHEET (MSDS)

EM Science
MATERIAL SAFETY DATA SHEET

Section I Product Identification and Use

Manufacturer: EM SCIENCE
A Division of EM Industries
P.O. Box 70
480 Democrat Road
Gibbstown, N.J. 08027

For More Information Call
856-423-6300 Technical Service
Monday - Friday; 8:00 AM to 5:00 PM

In Case of Emergency Call
800-424-9300 CHEMTREC (USA)
416-201-6383 CANUTEC (Canada)
24 Hours/Day; 7 Days/Week

Product Name: Page blue 83
Product Code(s): B44246, B44245,
Chemical Name/Other Name: Page blue 83, C.I. 42660, brilliant blue R, kenacid blue R, milling blue 2BR
Chemical Formula: C₄₄H₄₄N₄S₂O₂Na
Chemical Family: Dye
TDG Shipping Name/UN: Not regulated
TDG Classification/Packing group: Not regulated
Use: Laboratory reagent

Section II Hazardous Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page blue 83</td>
<td>6104-59-2</td>
<td>100</td>
</tr>
</tbody>
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Section III Physical Data

Physical State: Solid
Appearance and Odour: Dark blue powder
Odour Threshold: Not available
Specific Gravity: Not available
Vapour Pressure: Not applicable
Vapour Density: Not applicable
Evaporation Rate: Not applicable
Boiling Point: Not available
Freezing Point: Not available
pH: Not applicable
Coefficient of water/oil distribution: Not applicable

Section IV Fire or Explosion Hazard

Conditions of Flammability: Noncombustible. As with most organic substances, ignition is possible at elevated temperatures.
Extinguishing Media: Water spray, foam or dry powder. Firefighters should wear self-contained breathing apparatus.
Flash point / method: Not applicable
UEL: Not applicable
LEL: Not applicable
Autoignition Temperature: Not applicable
Hazardous Combustion Products: NOₓ, SOₓ, COₓ
Explosion data - sensitivity to mechanical impact: No
- sensitivity to static discharge: No

Section V Reactivity Data

Conditions of instability: Normally stable
Incompatibilities: Oxidizers
Conditions of reactivity: Normally stable
Hazardous decomposition products: NO₂, SO₂, CO₂

Section VI Toxicological Properties / Health Hazard Data

Route of entry:
- skin contact: Stains
- skin absorption: May be harmful
- eye contact: May irritate
- inhalation: May be harmful
- ingestion: May be harmful

LC₅₀: Not available
LD₅₀: Not available

Exposure Limits: Not established

Effects of Acute Exposure: No information available
Effects of Chronic Exposure: No information available

Irritancy: No experimental information available

Sensitization to Product: No information available
Carcinogenicity: No information available
Reproductive Toxicity: No information available
Teratogenicity: No information available
Mutagenicity: No information available

Toxicologically Synergistic Products: None found

Section VII First aid measures

Skin: Flush the contact area with lukewarm running water for at least 15 minutes. Remove contaminated clothing, taking care not to spread the chemical. If contamination is extensive, remove clothing under running water. Discard or decontaminate clothing under running water. Discard or decontaminate clothing before use. Unless contact has been slight, seek medical attention. Seek medical attention if irritation persists.

Eye: Flush the contaminated eye(s) for at least 15 minutes with lukewarm running water, holding the eyelids open. Take care not to rinse contaminated water into the non-affected eye. Always seek medical attention for accidents involving the eyes.

Inhalation: Take proper precautions to ensure your own safety before attempting rescue. Remove source of contamination or move victim to fresh air. If breathing has stopped, trained personnel should begin artificial respiration, or if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Seek medical attention.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink 200-400 ml of water to dilute. If breathing has stopped, trained personnel should begin artificial respiration, or if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Seek medical attention.

Section VIII Preventive Measures

Engineering Controls: Engineering control methods to reduce hazardous exposures are preferred. Methods include mechanical ventilation (dilution and local exhaust), process or personnel enclosure, control of process conditions, and process modification. Administrative controls and personal protective equipment may also be required.

Personal protective equipment:
- gloves: Rubber, plastic
- respiratory protection: Dust mask as appropriate
- eye protection: Chemical safety goggles
- clothing: Plastic apron, sleeves and boots as appropriate

Storage Requirements: Store in suitable labelled containers. Keep containers tightly closed when not in use and when empty. Protect from damage. Store in a cool, dry, well-ventilated area, out of direct sunlight. Store away from incompatible materials.

Handling Procedures and Equipment: Follow routine safe handling procedures.

Leak or Spill Clean-up: Before dealing with spillages take necessary protective measures, inform others to keep at a safe distance and, for flammable
materials, shut off all possible sources of ignition. Transfer carefully into container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent.

**Disposal:** Follow all federal, provincial and local regulations for disposal. Use only licensed disposal and waste hauling companies. Disposal of small amounts of spilled material may be handled as described under "Leak or Spill Cleanup". Large spills must be dealt with separately and must be handled by qualified disposal companies.

**Special Shipping Information:** Follow all TDG regulations and see classification in Section I

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**Section IX Preparation Information**

**Prepared by:** Technical Affairs Department, BDH Inc.,
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(416) 255-8521

**For questions contact:** Regulatory Affairs Department, EM Science
Gibbstown, NJ
(856) 423-6300

**Date:** 04/17/89

**Revision date:** SEPT 23, 1997; Sep 28, 2000

**Note:** This product is not controlled by WHMIS.

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