Material Safety Data Sheet
Hema 3, Solution II

Section 1 - Chemical Product and Company Identification

MSDS Name:
Hema 3, Solution II

Catalog Numbers:
2300579, 23122911C, 23122952, 23123869C, 55851C

Synonyms:
Company Identification:
Biochemical Sciences, Inc.
100 Clarendon Drive
Swedesboro, NJ 08085

Company Phone Number:
(800) 524-0294

Emergency Phone Number:
(800) 424-9300

CHEMTREC Phone Number:
800-424-9300

CHEMTREC (International):
703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>Balance</td>
<td>231-791-2</td>
</tr>
<tr>
<td>531-55-5</td>
<td>Azure B</td>
<td>&lt;1.0</td>
<td>208-511-2</td>
</tr>
<tr>
<td>7778-77-0</td>
<td>Potassium Phosphate</td>
<td>0.5</td>
<td>231-913-4</td>
</tr>
<tr>
<td>10049-21-5</td>
<td>Sodium Phosphate</td>
<td>0.4</td>
<td>Not available.</td>
</tr>
<tr>
<td>7220-79-3</td>
<td>Methylene Blue</td>
<td>0.1</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Hazard Symbols:
Risk Phrases:

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: blue
Caution! May cause irritation. This is expected to be a low hazard for usual industrial handling.
Target Organs: none known.

Potential Health Effects

Eye:
No information regarding eye irritation and other potential effects was found.
Material Safety Data Sheet
Hema 3, Solution II

Skin:
Low hazard for usual industrial handling.

Ingestion:
May cause irritation of the digestive tract.

Inhalation:
Low hazard for usual industrial handling.

Chronic:
No information found.

Section 4 - First Aid Measures

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

Skin:
Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:
Remove from exposure to fresh air immediately. Get medical aid if cough or other symptoms appear.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:
Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature:
No information available.

Flash Point:

NFPA Rating:
Not published.

Explosion Limits:
Lower: Upper:

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container.
Material Safety Data Sheet
Hema 3, Solution II

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:
Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Good general ventilation should be sufficient to control airborne levels.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Azure B</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Potassium Phosphate</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Sodium Phosphate</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Methylene Blue</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: blue
Odor: odorless
pH: No information available.
Vapor Pressure: No information available.
Vapor Density: No information available.
Evaporation Rate: No information available.
Material Safety Data Sheet  
Hema 3, Solution II

Viscosity: No information available.
Boiling Point: 100°C (212.00°F)
Freezing/Melting Point: No information available.
Decomposition Temperature: No information available.
Solubility: Soluble.
Specific Gravity/Density: No information available.
Molecular Formula: No information available.
Molecular Weight: No information available.

Section 10 - Stability and Reactivity

Chemical Stability:
Stable.

Conditions to Avoid:
Incompatible materials.

Incompatibilities with Other Materials
Strong oxidizing agents.

Hazardous Decomposition Products
Oxides of carbon.

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000.
CAS# 531-55-5: SO5550000.
CAS# 7778-77-0 unlisted.
CAS# 10049-21-5 unlisted.
CAS# 7220-79-3: SP5740000.

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 531-55-5:
No information available. CAS# 7778-77-0:
No information available. CAS# 10049-21-5:
No information available. CAS# 7220-79-3:
No information available.

Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 531-55-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7778-77-0: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 10049-21-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7220-79-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
Material Safety Data Sheet
Hema 3, Solution II

Epidemiology:
Teratogenicity:
Reproductive:
Mutagenicity
Neurotoxicity
Other:

Section 12 - Ecological Information
No information available.

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
RCRA P Series Wastes
None of the components are on this list.
RCRA U Series Wastes
None of the components are on this list.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
<th>Canadian TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>No information available.</td>
<td>No information available.</td>
<td>No information available.</td>
<td>No information available.</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US Federal
TSCA
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 531-55-5 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 7778-77-0 is listed on the TSCA Inventory.
CAS# 10049-21-5 is not on the TSCA Inventory. It is a hydrate and exempt from TSCA Inventory requirements (40CFR270.3(u)(2)).
CAS# 7220-79-3 is not listed on the TSCA Inventory. It is for research and development use only.

Health and Safety Reporting List
None of the components are on this list.

Chemical Test Rules
None of the components are on this list.

TSCA Section 12b
None of the components are on this list.

TSCA Significant New Use Rule (SNUR)
None of the components are on this list.
Material Safety Data Sheet
Hema 3, Solution II

SARA Reportable Quantities (RQ)
None of the components are on this list.

SARA Threshold Planning Quantities (TPQ)
None of the components are on this list.

SARA Hazard Categories
CAS# 7778-77-0: acute.

CERCLA/SARA Section 313
None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)
None of the components are on this list.

Clean Air Act - Class 1 Ozone Depleters
None of the components are on this list.

Clean Air Act - Class 2 Ozone Depleters
None of the components are on this list.

Clean Water Act - Hazardous Substances
None of the components are on this list.

Clean Water Act - Priority Pollutants
None of the components are on this list.

Clean Water Act - Toxic Pollutants
None of the components are on this list.

OSHA - Highly Hazardous
None of the components are on this list.

US State

State Right to Know

California Regulations
CAS# 7732-18-5: No information available.
CAS# 531-55-5: No information available.
CAS# 7778-77-0: No information available.
CAS# 10049-21-5: No information available.
CAS# 7220-79-3: No information available.

European/International Regulations

European Labelling in Accordance with EC Directives:
Hazard Symbols:
Risk Phrases:
Safety Phrases:

WGK (Water Danger/Protection)
CAS# 7732-18-5: No information available.
CAS# 531-55-5: No information available.
CAS# 7778-77-0: 1
CAS# 10049-21-5: 1
CAS# 7220-79-3: No information available.

Canadian DSL/NDSL
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 7778-77-0 is listed on Canada's DSL List.

Canadian WHMIS Classifications
No information available.
Material Safety Data Sheet
Hema 3, Solution II

Canada Ingredient Disclosure List
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 531-55-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 7778-77-0 is not listed on Canada's Ingredient Disclosure List.
CAS# 10049-21-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 7220-79-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

MSDS Creation Date: March 9, 1995
Revision Date: May 18, 1998

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.