**IDENTIFICATION**

**MSDS Record Number:** 5617932  
**Product Name(s):** HEMATOXYLIN, CERTIFIED  
**Product Identification:**  
- PRODUCT NUMBER: H0304  
- PRODUCT CODE: M906, E106  
- C.A.S. NUMBER: 517-28-2  

**Date of MSDS:** 2006-01-16  
**Currency Note:** This MSDS was acquired from the supplier on 2007-09-06.

**MANUFACTURER/SUPPLIER INFORMATION**

**Company:** MALLINCKRODT BAKER INC

**MATERIAL SAFETY DATA**

**Effective Date:** 01/16/06  
**Supercedes:** 05/14/03

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**MSDS MATERIAL SAFETY DATA SHEET**

**From:** Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

**Emergency Telephone Number:** 908-859-2151

NOTE: Use CHEMTREC and CANUTEC phone numbers only in the event of a chemical emergency.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

M A L L I N C K R O D T  
J. T. B A K E R

HEMATOXYLIN, CERTIFIED

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1. **Product Identification**

   **Synonyms:** hematoxylin; CI75290; Natural black 1; Hydroxybrasilin
   **CAS No:** 517-28-2  
   **Molecular Weight:** 302  
   **Chemical Formula:** C16H14O6  
   **Product Codes:** J.T. Baker:
2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
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<tbody>
<tr>
<td>Hematoxylin</td>
<td>517-28-2</td>
<td>90 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

CAUTION! MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

SAP-T-DATA(tm) Ratings (Provided here for your convenience)

- Health Rating: 2 - Moderate
- Flammability Rating: 1 - Slight
- Reactivity Rating: 1 - Slight
- Contact Rating: 2 - Moderate
- Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
- Storage Color Code: Green (General Storage)

Potential Health Effects

Information on the human health effects from exposure to this substance is limited.

Inhalation:
May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion:
Large oral doses may cause irritation to the gastrointestinal tract.

Skin Contact:
May cause irritation. May be absorbed through skin.

Eye Contact:
May cause irritation, redness and pain.

Chronic Exposure:
No information found.

Aggravation of Pre-existing Conditions:
No information found.

4. First Aid Measures

Inhalation:
Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:
Give several glasses of water to drink to dilute. If large amounts were
swallowed, get medical advice.

Skin Contact:
Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire Fighting Measures

Fire:
As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed light-resistant container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
None established.

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of
Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved):
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear protective gloves and clean body-covering clothing.

Eye Protection:
Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Brown crystals.
Odor: No information found.
Solubility: Slightly soluble in cold water.
Specific Gravity: No information found.
Ph: No information found.
% Volatiles by volume @ 21°C (70°F): 0

Boiling Point: Not applicable.
Melting Point: 160°C (212°F)
Vapor Density (Air=1): No information found.
Vapor Pressure (mm Hg): No information found.
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage. Light sensitive. May discolor on exposure to light.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:
This substance does not polymerize.

Incompatibilities:
Strong oxidizers.

Conditions to Avoid:
No information found.
11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure. Investigated as a tumorigen.

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<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen--</th>
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<tr>
<td>IARC Category</td>
<td>None</td>
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12. Ecological Information

Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

---\Chemical Inventory Status - Part 1\---

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---\Chemical Inventory Status - Part 2\---

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---\Federal, State & International Regulations - Part 1\---

<table>
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<th>Ingredient</th>
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---\Federal, State & International Regulations - Part 2\---

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<th>Ingredient</th>
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16. Other Information

NFFA Ratings:
Health: 1 Flammability: 0 Reactivity: 1

Label Hazard Warning:
CAUTION! MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.
MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions:
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.

Label First Aid:
If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person.

Product Use:
Laboratory Reagent.

Revision Information:
MSDS Section(s) changed since last revision of document include: 3.

Disclaimer:
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