MATERIAL SAFETY DATA SHEET

SECTION I NAME
Product: Orcein, Biological Stain
Chemical Synonyms: Orcein, Biological Stain, C.I. No. 1242
Formula: C_{28}H_{24}O_{7}N_{2}
Unit Size: up to 2.5 Kg.
C.A.S. No.: 1400-62-0

SECTION II INGREDIENTS OF MIXTURES
Principal Component(s): Orcein, synthetic, biological stain
% by Volume: 100%
TLV Units

SECTION III PHYSICAL DATA
Melting Point (°F): Data not listed.
Boiling Point (°F): Decomposes.
Vapor Pressure (mm Hg): Negligible as solid.
Vapor Density (Air=1): Data not listed.
Solubility in Water: Practically insoluble in water.
Appearance & Odor: Brownish-red microcrystalline powder; no odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA
Flash Point (Method Used): Non-flammable.
Flammable Limits in Air % by Volume: Lower N/A Upper N/A
Extinguisher Media: Water spray; carbon dioxide (CO_{2}); dry chemical.

SECTION V HEALTH HAZARD DATA
Threshold Limited Value: None established by (ACGIH 2001).
Effects of Overexposure: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Exercise appropriate procedures to minimize opportunities for direct contact with the skin or eyes and to prevent inhalation of dust. Target organs: None known.

SECTION VI REACTIVITY DATA
Stability: Unstable
Incompatibility (Materials to Avoid): Strong oxidizing materials.

SECTION VII SPILL OR LEAK PROCEDURES
Steps to be taken in case material is released or spilled: Wearing suitable protective clothing, avoid making dust, sweep up material and place in a suitable container for disposal by incineration. Wash spill area well with soap and water.

SECTION VIII SPECIAL PROTECTION INFORMATION
Respiration Protection (Specify Type): None should be needed in normal laboratory handling. If dusty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved dust mask.
Ventilation: Local Exhaust Recommended. Special No. Mechanical (General) Recommended. Other No.
Protective Gloves: Rubber.
Eye Protection: Chemical safety glasses.

SECTION IX SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing: Store in a cool, dry place away from oxidizing materials and protect from light. Wash thoroughly after handling.

SECTION X 24 HOUR EMERGENCY ASSISTANCE
CHEMTREC Phone: 800-424-9300
Health: 1
Fire: 1
Reactivity: 1
HAMSA: *

UNUSUAL FIRE AND EXPLOSION HAZARDS
Fire or excessive heat may produce hazardous decomposition products of oxides of nitrogen (NO_{x}); can react with oxidizing materials.

UNIQUE FIRE AND EXPLOSION PROPERTIES

INHALATION:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

INGESTION:
Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

INFLAMMABILITY
Non-flammable.

NON-REGULATED.
Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

D.O.T.
NON-REGULATED.

EFFECTS OF ACUTE EXPOSURE
Health hazard: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Exercise appropriate procedures to minimize opportunities for direct contact with the skin or eyes and to prevent inhalation of dust. Target organs: None known.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

INGESTION:
Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

HAZARDOUS DECOMPOSITION PRODUCTS:
When heated to decomposition, emits toxic fumes of oxides of nitrogen (NO_{x}) and carbon oxides.

HAZARDOUS POLYMERIZATION:
Conditions to Avoid: None established by (ACGIH 2001).

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Wearing suitable protective clothing, avoid making dust, sweep up material and place in a suitable container for disposal by incineration. Wash spill area well with soap and water.

WASTE DISPOSAL METHOD:
Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Dispose of in an approved incinerator or contract with a licensed waste disposal service.