**Material Safety Data Sheet**

**Phloxine B**

**Section 1 - Chemical Product and Company Identification**

**MSDS Name:** Phloxine B  
**Synonyms:** Acid Red 92; Cyanosine; Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-4,5,6,7-tetrachloro-3',6'-dihydroxy-, disodium salt; C.I. 45410; C.I. Acid Red 92; D&C Red No. 28; Eosin Blue; Eosine Blue; Food Dye Red No. 104; Phloxin B; Phloxine B; Phloxine P; Fluorescein, 2',4',5',7'-tetrabromo-4,5,6,7-tetrachloro-, disodium salt.

**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>18472-87-2</td>
<td>Phloxine B</td>
<td>&gt;80</td>
<td>242-355-6</td>
</tr>
</tbody>
</table>

**Section 3 - Hazards Identification**

**EMERGENCY OVERVIEW**

Appearance: red to brown powder.  
**Caution!** May cause eye, skin, and respiratory tract irritation. May be harmful if swallowed.  
**Target Organs:** No data found.

**Potential Health Effects**

**Eye:** May cause eye irritation. No information regarding eye irritation and other potential effects was found.  
**Skin:** May cause skin irritation. No information regarding skin irritation and other potential effects was found.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** The toxicological properties of this substance have not been fully investigated. Inhalation of dust may cause respiratory tract irritation.

**Chronic:** Not available. Caused liver tumors in mice when fed continuously for 90 weeks at very large doses.(RTECS)

**Section 4 - First Aid Measures**

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

**Skin:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

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### 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. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use water spray, dry chemical, or carbon dioxide.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 1; Flammability: 1; Instability: 0

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### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

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### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substrates. Keep containers tightly closed.

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### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phloxine B</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**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 minimize contact with skin.

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### Section 9 - Physical and Chemical Properties

- **Physical State:** Powder
- **Appearance:** red to brown
- **Odor:** None reported.
- **pH:** Not available.
- **Vapor Pressure:** Negligible.
- **Vapor Density:** Not available.
- **Evaporation Rate:** Negligible.
- **Viscosity:** Not available.
- **Boiling Point:** Not available.
- **Freezing/Melting Point:** Not available.
- **Decomposition Temperature:** Not available.
- **Solubility:** Soluble.
- **Specific Gravity/Density:** Not available.
- **Molecular Formula:** C20H2Br4Cl4Na2O5
- **Molecular Weight:** 829.64

### Section 10 - Stability and Reactivity

- **Chemical Stability:** Stable under normal temperatures and pressures.
- **Conditions to Avoid:** High temperatures, dust generation.
- **Incompatibilities with Other Materials:** Strong oxidizing agents.
- **Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, carbon dioxide, hydrogen bromide.
- **Hazardous Polymerization:** Has not been reported.

### Section 11 - Toxicological Information

- **RTECS#:** LM5900000
- **CAS#:** 18472-87-2
- **LD50/LC50:**
  - Oral, mouse: LD50 = 310 mg/kg;
  - Oral, rat: LD50 = 8400 mg/kg;

- **Carcinogenicity:** CAS# 18472-87-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

- **Epidemiology:** No data available.
- **Teratogenicity:** Effects on Newborn: Growth statistics and Fetotoxicity, oral-rat TDLo= 63g/kg. Specific Developmental Abnormalities: Craniofacial, oral-mouse TDLo=66g/kg; Musculoskeletal, oral-mouse TDLo= 39600mg/kg.
- **Reproductive Effects:** Experimental reproductive effects. Oral, Rat: TDLo= 63 gm/kg; fetotoxicity.
**Mutagenicity:** See actual entry in RTECS for complete information.

**Neurotoxicity:** No information reported

**Other Studies:**

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA</th>
<th>Hazard Class:</th>
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<tbody>
<tr>
<td><strong>Shipping Name:</strong> Not regulated as a hazardous material</td>
<td></td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

**Hazard Symbols:**

Not available.

**Risk Phrases:**

**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

Section 16 - Additional Information

**MSDS Creation Date:** 12/04/2000

**Revision #3 Date:** 10/03/2005
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 INDO GULF GROUP 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 INDO GULF GROUP has been advised of the possibility of such damages.