Material Safety Data Sheet
Bromopyrogallol Red MSDS

Section 1: Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Bromopyrogallol Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Codes:</td>
<td>20319</td>
</tr>
<tr>
<td>CAS#:</td>
<td>16574-43-9</td>
</tr>
<tr>
<td>RTECS:</td>
<td>Unlisted.</td>
</tr>
<tr>
<td>TSCA:</td>
<td>Not available</td>
</tr>
<tr>
<td>Synonym:</td>
<td>5',5''-Dibromopyrogallolsulfonephthalein</td>
</tr>
<tr>
<td>Chemical Formula:</td>
<td>C19H10Br2O8S</td>
</tr>
</tbody>
</table>

Contact Information:
Finar Limited
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad,
Email: info@finarchemicals.com
Web: www.finarchemicals.com

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromopyrogallol Red</td>
<td>16574-43-9</td>
<td>&gt;99%</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

EMERGENCY OVERVIEW
Appearance: dark green crystalline powder.
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: None known.

Potential Health Effects
Eye: May cause eye irritation. The toxicological properties of this material have not been fully investigated.
Skin: May cause skin irritation. The toxicological properties of this material have not been fully investigated.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.
Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
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 eyelids. Get medical aid immediately.

Skin:
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

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 immediately.
Inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is
difficult, give oxygen. Get medical aid.
**Notes to Physician:** Treat symptomatically and supportively.

---

**Section 5: Fire and Explosion Data**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH
(approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by
thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect
in low or confined areas.

**Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide,
or appropriate foam.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

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

**Upper:** N/A

---

**Section 6: Accidental Release Measures**

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

**Spills/Leaks:**
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a
suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

---

**Section 7: Handling and Storage**

**Handling:**
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate
ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:**
Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area
away from incompatible substances.

---

**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>Bromopyrogallol Red</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Bromopyrogallol Red, Indicator Grade: No OSHA Vacated PELs are listed for this chemical.

**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. Use
a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or
other symptoms are experienced.

---

**Section 9: Physical and Chemical Properties**

**Physical State:** Crystalline powder

**Appearance:** dark green

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 19.2

**Evaporation Rate:** Not available.
Section 10: Stability and Reactivity Data

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials, excess heat, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products:
Carbon monoxide, oxides of sulfur, oxides of sulfur, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Has not been reported.

Section 11: Toxicological Information

RTECS#:
CAS# 16574-43-9 unlisted.
LD50/LC50:
Not available.

Carcinogenicity:
CAS# 16574-43-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Section 12: Ecological Information

No information available.

Section 13: Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14: Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name</td>
<td>Not regulated as a hazardous material</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15: Other Regulatory Information

US FEDERAL
TSCA
CAS# 16574-43-9 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
CAS# 16574-43-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
Not available.

**Risk Phrases:**

**Safety Phrases:**
- S 24/25 Avoid contact with skin and eyes.
- S 37 Wear suitable gloves.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 28A After contact with skin, wash immediately with plenty of water

**WGK (Water Danger/Protection)**
CAS# 16574-43-9: No information available.

**Canada - DSL/NDSL**
CAS# 16574-43-9 is listed on Canada's NDSL List.

**Canada - WHMIS**
WHMIS: Not available.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/06/2010

**Last Updated:** 24/11/2012

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 Finar Limited 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 Finar Limited has been advised of the possibility of such damages.