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# Material Safety Data Sheet

## PHENOL RED, FREE ACID MSDS

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### 1. Product Identification

**Synonyms:** Phenol red; phenolsulfonphthalein; 4,4;-(3H-2,1-benzoxathiol-3-ylidene) bis-phenol, S,S-dioxide.

**CAS No.:** 143-74-8

**Molecular Weight:** 354.38

**Chemical Formula:** C<sub>19</sub>H<sub>14</sub>O<sub>5</sub>S

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### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
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Phenol Red, Free Acid	143-74-8	0.1%

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### 3. Hazards Identification

**Emergency Overview**

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CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

J. T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

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Health Rating: 1 - Slight  
Flammability Rating: 1 - Slight  
Reactivity Rating: 1 - Slight  
Contact Rating: 1 - Slight  
Lab Protective Equip: GOGGLES; LAB COAT  
Storage Color Code: Orange (General Storage)

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### Potential Health Effects

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

**Inhalation:**

May cause irritation to respiratory tract resulting in coughing and sneezing.

**Ingestion:**

Ingestion effects have not been studied completely but may exhibit symptoms similar to phenolphthalein, such as an itching skin rash. May be a strong laxative.

**Skin Contact:**

May cause irritation with redness and pain.

**Eye Contact:**

May cause irritation and pain.

**Chronic Exposure:**

No information found.

**Aggravation of Pre-existing Conditions:**

No information found.

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## 4. First Aid Measures

**Inhalation:**

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

**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

**Skin Contact:**

Immediately flush skin with plenty of 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:**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

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## 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:**

Dry chemical, foam or carbon dioxide.

**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.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## 7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. 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.

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## 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.

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## 9. Physical and Chemical Properties

### **Appearance:**

Bright red, crystalline powder.

### **Odor:**

Odorless.

### **Solubility:**

Slightly soluble in water.

### **Specific Gravity:**

No information found.

### **pH:**

No information found.

### **% Volatiles by volume @ 21C (70F):**

0

### **Boiling Point:**

No information found.

**Melting Point:**

No information found.

**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.

**Hazardous Decomposition Products:**

Burning may produce carbon monoxide, carbon dioxide, sulfur oxides.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizers.

**Conditions to Avoid:**

Incompatibles.

## 11. Toxicological Information

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

-----\Cancer

Lists\-----

Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	
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Phenol Red, Free Acid (143-74-8)	No	No	
None			

## 12. Ecological Information

**Environmental Fate:**

When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is not expected to evaporate significantly.

**Environmental Toxicity:**

No information found.

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### 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.

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### 14. Transport Information

Not regulated.

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### 15. Regulatory Information

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

Ingredient	TSCA	EC	Japan
Australia			
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Phenol Red, Free Acid (143-74-8)	Yes	Yes	Yes
Yes			

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

Ingredient	Korea	DSL	---Canada--- NDSL
Phil.			
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Phenol Red, Free Acid (143-74-8) Yes Yes No  
Yes

-----\Federal, State & International Regulations - Part  
1\-----  
-----SARA 302- -----SARA  
313-----  
Ingredient RQ TPQ List  
Chemical Catg.  
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Phenol Red, Free Acid (143-74-8) No No No  
No

-----\Federal, State & International Regulations - Part  
2\-----  
-----RCRA-  
-TSCA-  
Ingredient CERCLA 261.33  
8(d)  
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Phenol Red, Free Acid (143-74-8) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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## 16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 1 Reactivity: 0

**Label Hazard Warning:**

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Label Precautions:**

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

**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. If irritation develops call a physician.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

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