Material Safety Data Sheet
Benzoquinone (para-) MSDS

Section 1: Chemical Product and Company Identification

Product Name: Benzoquinone (para-)
Catalog Codes: SLB4630
CAS#: 106-51-4
RTECS: DK2625000
TSCA: TSCA 8(b) inventory: Benzoquinone (para-)
Cl#: Not available.
Synonym: 1,4-Benzoquinone
Chemical Name: Quinone
Chemical Formula: C6H4O2

Contact Information:
Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396
US Sales: 1-800-901-7247
International Sales: 1-281-441-4400
Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300
International CHEMTREC, call: 1-703-527-3887
For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzoquinone (para-)</td>
<td>106-51-4</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Benzoquinone (para-): ORAL (LD50): Acute: 130 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Extremely hazardous in case of eye contact (irritant), of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of inhalation. Hazardous in case of skin contact (permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
Extremely hazardous in case of eye contact (irritant), of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of inhalation. Hazardous in case of skin contact (permeator). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Section 4: First Aid Measures

**Eye Contact:**
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

**Skin Contact:**
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Serious Skin Contact:**
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

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

**Serious Inhalation:**
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

**Ingestion:**
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Serious Ingestion:**
Not available.

Section 5: Fire and Explosion Data

**Flammability of the Product:**
May be combustible at high temperature.

**Auto-Ignition Temperature:** 560°C (1040°F)

**Flash Points:**
CLOSED CUP: 77°C (170.6°F). (Setaflash.)

**Flammable Limits:** Not available.

**Products of Combustion:**
These products are carbon oxides (CO, CO2).

**Fire Hazards in Presence of Various Substances:**
Not available.

**Explosion Hazards in Presence of Various Substances:**
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:**
Material in powder form, capable of creating a dust explosion.

**Special Remarks on Explosion Hazards:**
Not available.

Section 6: Accidental Release Measures

**Small Spill:**
Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill:**
Corrosive solid. Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources.
Section 7: Handling and Storage

Precautions:
Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.1 CEIL: 0.3 TWA: 0.4 CEIL: 2 Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystalline solid.)

Odor: Pungent.

Taste: Not available.

Molecular Weight: 108 g/mole

Color: Yellow.

pH (1% soln/water): Not available.

Boiling Point: Decomposes.

Melting Point: 115.7°C (240.3°F)

Critical Temperature: Not available.

Specific Gravity: 1.318 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 3.7 (Air = 1)

Volatility: Not available.

Odor Threshold: 0.1 ppm
**Water/Oil Dist. Coeff.**: Not available.

**Ionicity (in Water)**: Not available.

**Dispersion Properties**: See solubility in water.

**Solubility**: Partially soluble in cold water, hot water.

### Section 10: Stability and Reactivity Data

**Stability**: The product is stable.

**Instability Temperature**: Not available.

**Conditions of Instability**: Not available.

**Incompatibility with various substances**: Reactive with oxidizing agents.

**Corrosivity**: Non-corrosive in presence of glass.

**Special Remarks on Reactivity**: Not available.

**Special Remarks on Corrosivity**: Not available.

**Polymerization**: Will not occur.

### Section 11: Toxicological Information

**Routes of Entry**: Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals**: Acute oral toxicity (LD50): 130 mg/kg [Rat].

**Chronic Effects on Humans**: Not available.

**Other Toxic Effects on Humans**: Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (corrosive, irritant). Hazardous in case of skin contact (permeator), of eye contact (corrosive), of inhalation (lung corrosive).

**Special Remarks on Toxicity to Animals**: Not available.

**Special Remarks on Chronic Effects on Humans**: Not available.

**Special Remarks on other Toxic Effects on Humans**: Not available.

### Section 12: Ecological Information

**Ecotoxicity**: Not available.

**BOD5 and COD**: Not available.

**Products of Biodegradation**: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**: The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation**: Not available.

### Section 13: Disposal Considerations

**Waste Disposal**: 
### Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** Benzoquinone UNNA: UN2587 PG: II

**Special Provisions for Transport:** Not available.

### Section 15: Other Regulatory Information

**Federal and State Regulations:**
Pennsylvania RTK: Benzoquinone (para-) Massachusetts RTK: Benzoquinone (para-) TSCA 8(b) inventory: Benzoquinone (para-)
SARA 313 toxic chemical notification and release reporting: Benzoquinone (para-)
CERCLA: Hazardous substances.

**Other Regulations:**

**Other Classifications:**

**WHMIS (Canada):**
CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC), CLASS D-2B: Material causing other toxic effects (TOXIC), CLASS E: Corrosive solid.

**DSCL (EEC):**
R25- Toxic if swallowed. R34- Causes burns.

**HMIS (U.S.A.):**
- Health Hazard: 3
- Fire Hazard: 2
- Reactivity: 0
- Personal Protection: j

**National Fire Protection Association (U.S.A.):**
- Health: 3
- Flammability: 2
- Reactivity: 0
- Specific hazard:

**Protective Equipment:**
Gloves. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/09/2005 04:20 PM

**Last Updated:** 05/21/2013 12:00 PM

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 ScienceLab.com 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 ScienceLab.com has been advised of the possibility of such damages.