MATERIAL SAFETY DATA SHEET
Copper, shots, turnings, foil, granules, wire.

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Copper, shots, turnings, foil, granules, wire.

**Catalog Numbers:** 20769-0000, 20769-1000, 20769-5000, 31791-0000, 31791-2500

**Synonyms:**

**Company Identification:** Acros Organics BVBA
Janssen Pharmaceuticalalaan 3a
2440 Geel, Belgium

**Company Identification: (USA)**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**For information in the US, call:** 800-ACROS-01

**For information in Europe, call:** +32 14 57 52 11

**Emergency Number, Europe:** +32 14 57 52 99

**Emergency Number US:** 201-796-7100

**CHEMTREC Phone Number, US:** 800-424-9300

**CHEMTREC Phone Number, Europe:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-50-8</td>
<td>Copper</td>
<td>&gt;99%</td>
<td>231-159-6</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** None listed

**Risk Phrases:** None listed

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**
Not available

**Potential Health Effects**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

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

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:**

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.

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

**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:** Individuals with Wilson's disease are more susceptible to chronic copper poisoning. 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.

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

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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. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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**Section 8 - Exposure Controls, Personal Protection**

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

**Exposure Limits**

CAS# 7440-50-8:

- United Kingdom, WEL - TWA: 0.2 mg/m³ TWA (fume); 1 mg/m³ TWA (dust and mist) United Kingdom, WEL - STEL: 0.6 mg/m³ STEL (fume); 2 mg/m³ STEL (dust and mist)
- United States OSHA: 0.1 mg/m³ TWA (fume); 1 mg/m³ TWA (dusts and mists)
- Belgium - TWA: 0.2 mg/m³ VLE (fume); 1 mg/m³ VLE (dust and mist)
- France - VME: 0.2 mg/m³ VME (fume); 1 mg/m³ VME (dust, as Cu) France - VLE: 2 mg/m³ VLE (dust, as Cu)
- Germany: 1 mg/m³ TWA (inhalable fraction); 0.1 mg/m³ TWA (respirable fraction, smoke)
- Malaysia: 0.2 mg/m³ TWA (fume, as Cu); 1 mg/m³ TWA (dust and mist, as Cu)
- Netherlands: 0.2 mg/m³ MAC (smoke); 1 mg/m³ MAC (dust)
- Russia: 0.5 mg/m³ TWA (aerosol)
- Spain: 0.2 mg/m³ VLA-ED (fume); 1 mg/m³ VLA-ED (dust and mist, as Cu)

**Personal Protective Equipment**

**Eyes:** Wear chemical splash goggles.

**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.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Granules
Color: brown
Odor: Not available
pH: Not available
Vapor Pressure: 1.3mbar @1628 deg C
Viscosity: Not available
Boiling Point: 2595 deg C @760mmHg (4,703.00°F)
Freezing/Melting Point: 1083 deg C (1,981.40°F)
Autoignition Temperature: Not available
Flash Point: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 8.920
Molecular Formula: Cu
Molecular Weight: 63.54

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Air sensitive.
Conditions to Avoid: Incompatible materials, exposure to air.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, acid chlorides, ammonium nitrate, halogens, azides.
Hazardous Decomposition Products: Not available
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7440-50-8: GL5325000 GL7440000 GL7590000
LD50/LC50: RTECS: Not available.
Carcinogenicity: Copper - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not 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>Shipping Name:</th>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
</tr>
</thead>
</table>

USA RQ: CAS# 7440-50-8: 5000 lb final RQ (no reporting of releases of this hazardous substa

Section 15 - Regulatory Information

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.

WGK (Water Danger/Protection)
  CAS# 7440-50-8: 0

Canada
  CAS# 7440-50-8 is listed on Canada's DSL List

US Federal

TSCA
  CAS# 7440-50-8 is listed on the TSCA Inventory.

**Section 16 - Other Information**

**MSDS Creation Date:** 7/16/1996
**Revision #1 Date** 6/05/2007

Revisions were made in Sections: 1, 2, 3, 4, 6, 7, 8, 9, 10, 14

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