Material Safety Data Sheet
Copper chromite, catalyst

MSDS# 66374

Section 1 - Chemical Product and Company Identification

MSDS Name: Copper chromite, catalyst
Catalog Numbers: AC197820000, AC197820050, AC197821000
Synonyms: None.

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

CAS#: 12018-10-9
Chemical Name: Chromium copper oxide
%: 100
EINECS#: 234-634-6

Hazard Symbols: XN
Risk Phrases: 20/21 36/37/38

Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Warning! May be harmful if absorbed through skin or if inhaled. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation. May cause chemical conjunctivitis.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled. Can produce delayed pulmonary edema.
Chronic: Effects may be delayed.

Section 4 - First Aid Measures
Eyes: Immediately 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. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or 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: Treat symptomatically and supportively.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

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

Autoignition Temperature: Not available.

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: NFPA Rating:

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 or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium copper oxide</td>
<td>none listed</td>
<td>[1 mg/m3 TWA (dust and mist, as Cu, except copper)]</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(listed under Chromium (VI))</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>[under Copper]</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>[mg/m3 Action]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[compounds, n.o.s.) 100 mg/m3]</td>
<td>5 mg/m3 TWA (as</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[IDLH (dust and mist, as Cu)]</td>
<td>Cancer (listed under CFR 1910.1026)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(listed under Copper)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[compounds, n.o.s.)]</td>
<td></td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Chromium copper oxide: None listed

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: brown-black fine
Odor: Not available
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Not available
Specific Gravity/Density: 
Molecular Formula: Cr2Cu2O5
Molecular Weight: 311.07

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, excess heat.

Incompatibilities with Other Materials: None reported.

Hazardous Decomposition Products: Nature of decomposition products unknown.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 12018-10-9: None listed
LD50/LC50: RTECS: Not available.

Carcinogenicity: Chromium copper oxide - California: carcinogen, initial date 2/27/87 (Chromium (VI) compounds). NTP: Known carcinogen (Chromium (VI) compounds). IARC: Group 1 carcinogen (Chromium (VI) compounds).

Other: The hazard classification for this product is based on supplier information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Shipping Name: DYES, SOLID, TOXIC, N.O.S.
Hazard Class: 6.1
UN Number: UN3143
Packing Group: III
Canada TDG
Shipping Name: Not available
Hazard Class:
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:
- R 20/21 Harmful by inhalation and in contact with skin.
- R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
- S 23 Do not inhale gas/fumes/vapour/spray.
- S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 12018-10-9: Not available

Canada

CAS# 12018-10-9 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, D2B

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.

CAS# 12018-10-9 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 12018-10-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 4/05/1997
Revision #8 Date 7/20/2009

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 the company 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 the company has been advised of the possibility of such damages.

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