

# Material Safety Data Sheet

## Copper (II) Bromide, Anhydrous, 99+%

ACC# 01969

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Copper (II) Bromide, Anhydrous, 99+%**Catalog Numbers:** AC206330000, AC206330050, AC206331000**Synonyms:** Cupric Bromide**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7789-45-9	Copper(II) Bromide	99+%	232-167-2

**Hazard Symbols:** XI**Risk Phrases:** 36/37/38

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: gray blue solid. Hygroscopic (absorbs moisture from the air). Causes eye and skin irritation. Causes digestive and respiratory tract irritation. May cause blood abnormalities. May cause liver damage. May cause lung damage. **Warning!**

**Target Organs:** Blood, central nervous system, liver, lungs.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause blood abnormalities. Ingestion of large amounts of copper salts may cause bloody stools and vomit, low blood pressure, jaundice and coma.

**Inhalation:** Dust is irritating to the respiratory tract. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

**Chronic:** May cause liver and kidney damage. Chronic ingestion may cause bromism characterized by disturbances of the central nervous system, skin and digestive tract.

### 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:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. 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.

**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.

**Antidote:** The use of Calcium disodium EDTA as a chelating agent should be determined by qualified medical personnel.

## 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. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

## 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. 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.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Copper(II) Bromide	none listed	none listed	none listed

**OSHA Vacated PELs:** Copper(II) Bromide: 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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** gray blue

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 900 deg C

**Freezing/Melting Point:** 498 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Soluble in water.

**Specific Gravity/Density:** 4.7700

**Molecular Formula:** Br<sub>2</sub>Cu

**Molecular Weight:** 223.354

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Moisture, potassium, and alkali metals.

**Hazardous Decomposition Products:** Irritating and toxic fumes and gases, hydrogen bromide, copper fumes.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7789-45-9 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 7789-45-9: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Neurotoxicity:** No information available.**Mutagenicity:** No information available.**Other Studies:** No data available.

<b>Section 12 - Ecological Information</b>
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No information available.

<b>Section 13 - Disposal Considerations</b>
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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

<b>Section 14 - Transport Information</b>
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	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

<b>Section 15 - Regulatory Information</b>
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**US FEDERAL****TSCA**

CAS# 7789-45-9 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health &amp; 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.

**SARA****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.

**SARA Codes**

CAS # 7789-45-9: acute.

**Section 313**

This material contains Copper(II) Bromide (listed as Copper), 99%, (CAS# 7789-45-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**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# 7789-45-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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:**

XI

**Risk Phrases:**

R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

**WGK (Water Danger/Protection)**

CAS# 7789-45-9: No information available.

**Canada - DSL/NDSL**

CAS# 7789-45-9 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

**Canadian Ingredient Disclosure List**

CAS# 7789-45-9 (listed as Copper) is listed on the Canadian Ingredient Disclosure List.

**Exposure Limits**

CAS# 7789-45-9 (listed as copper): OEL-ARAB Republic of Egypt:TWA 0.1 mg/m<sup>3</sup> (fume) OEL-AUSTRALIA:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-AUSTRALIA:TWA 1 mg/m<sup>3</sup> (dust) OEL-BELGIUM:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-BELGIUM:TWA 1 mg/m<sup>3</sup> (dust) OEL-DENMARK:TWA 0.1 mg/m<sup>3</sup> (fume) OEL-DENMARK:TWA 1 mg/m<sup>3</sup> (dust) OEL-FINLAND:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-FINLAND:TWA 1 mg/m<sup>3</sup> OEL-FINLAND:TWA 1 mg/m<sup>3</sup> (dust) OEL-FRANCE:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-FRANCE:TWA 1 mg/m<sup>3</sup>;STEL 2 mg/m<sup>3</sup> (dust) OEL-GERMANY:TWA 0.1 mg/m<sup>3</sup> (fume) OEL-GERMANY:TWA 1 mg/m<sup>3</sup> (dust) OEL-HUNGARY:TWA

0.2 mg/m<sup>3</sup>;STEL 0.4 mg/m<sup>3</sup> (dust) OEL-INDIA:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-  
THE NETHERLANDS:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-THE NETHERLANDS:TWA 1 mg/m<sup>3</sup> (  
dust) OEL-THE PHILIPPINES:TWA 1.0 mg/m<sup>3</sup> (fume) OEL-POLAND:TWA 0.1 mg  
/m<sup>3</sup> (fume) OEL-RUSSIA:STEL 0.5 ppm (1 mg/m<sup>3</sup>) (dust) OEL-SWEDEN:TWA 0  
.2 mg/m<sup>3</sup> (resp. dust) OEL-SWEDEN:TWA 0.2 mg/m<sup>3</sup> (fume) OEL-SWEDEN:TWA  
1 mg/m<sup>3</sup> (total dust) OEL-SWITZERLAND:TWA 0.1 mg/m<sup>3</sup>;STEL 0.2 mg/m<sup>3</sup> (f  
ume) OEL-SWITZERLAND:TWA 1 mg/m<sup>3</sup>;STEL 1 mg/m<sup>3</sup> OEL-THAILAND:TWA 0.1 m  
g/m<sup>3</sup> (fume) OEL-THAILAND:TWA 1 mg/m<sup>3</sup> OEL-UNITED KINGDOM:TWA 0.2 mg/m  
3 (fume) OEL-UNITED KINGDOM:TWA 1 mg/m<sup>3</sup> OEL IN BULGARIA, COLOMBIA, J  
ORDAN, KOREA check ACGIH TLV OEL IN NEW ZEAL

## Section 16 - Additional Information

**MSDS Creation Date:** 3/20/1998

**Revision #4 Date:** 3/18/2003

*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 Fisher 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 Fisher has been advised of the possibility of such damages.*