

# MATERIAL SAFETY DATA SHEET

BRANDT T.A.C.

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Issue Date: 08/11

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

BRANDT T.A.C. EPA Reg. No. 65109-1-48813  
Common Name: Algaecide / bactericide  
TSCA/CAS No.: This product is a mixture — there is no single CAS number.

### Manufactured For

Brandt Consolidated, Inc.  
2935 S. Koke Mill Road  
Springfield, Illinois 62711  
800 300 6559 ph

### Emergency Phone Numbers

CHEMTREC (24-Hour Emergency Number): (800) 424-9300  
EPA National Response Center: (800) 424-8802

## SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Copper sulfate pentahydrate	7758-99-8	19-21		
Contributing copper sulfate	7758-98-7	12.1-13.4	1.0 mg/m <sup>3</sup> (Dust/mist as copper)	10 lbs.
Sulfuric acid	7664-93-9	10.75-13.5	0.2 mg/m <sup>3</sup>	1,000 lbs.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Clear blue liquid with mild odor. Corrosive to eyes and skin. At elevated temperatures, the product will decompose generating oxides of sulfur. Avoid contact with strong bases, strong reducing agents and strong oxidizers. Keep out of streams, ditches, etc. due to pH lowering effect and metal and salt constituents. D.O.T. regulated as a corrosive liquid.

HEALTH: 2      REACTIVITY: 1      FLAMMABILITY: 0      ENVIRONMENT: 1  
(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

## SECTION 4. FIRST AID

Eyes: Immediately flush eyes with water for at least 15 minutes, lifting eyelids to thoroughly flush. If redness or irritation persists, get prompt medical attention.

Skin: Immediately flush affected area with water for at least 15 minutes. If burn occurs, seek immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get immediate medical attention.

Ingestion: If ingested drink large quantities of water. Do not induce vomiting. Contact physician immediately.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	Not available.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	At elevated temperatures, the product will decompose generating oxides of sulfur. May react with most metals to produce hydrogen gas, which can form an explosive mixture with air.
Properties that Initiate/Contribute to Intensity of Fire:	Not known.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	Water applied directly could result in splattering of acid solution.
Extinguishing Media:	Does not burn or support combustion. Use appropriate media for surrounding fire. Because material will readily mix with water to form a weak acid solution, avoid water contact with material if possible.
Special Firefighting Procedures:	Wear MSHA/NIOSH approved positive pressure, self-contained breathing apparatus (SCBA) with full face mask and full protective equipment.

SECTION 6.	SPILLS AND LEAKS
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Containment:	Flush with water into retaining area or container. Prevent product spillage from entering drinking water supplies or streams. Caution should be exercised regarding personal safety and exposure to released product.
Clean Up:	Neutralize solution with sodium bicarbonate or fertilizer grade lime and dispose of in accordance with all federal, state and local regulations.
Evacuation:	Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store original container in a cool, well-ventilated, dry place. Avoid storage in excessive heat as expansion of container may occur, creating spillage. Do not store in steel, galvanized or nylon equipment. Do not store near food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc. Do not use with materials or equipment sensitive to acidic solutions.
Work/Hygienic Practices:	Use good personal hygiene. Body shower for prolonged skin contact.

**SECTION 8. PERSONAL PROTECTIVE EQUIPMENT**

Eyes:	Wear protective eyewear (goggles, face shield or safety glasses) to prevent eye contact. As a general rule, do not wear contact lenses when handling.
Skin:	Long-sleeved shirt, long pants, shoes plus socks, chemical-resistant gloves.
Respiratory:	Ventilation and other forms of engineering controls are the preferred means for controlling exposures. A NIOSH/MSHA approved air purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.
Ventilation:	Provide appropriate ventilation and/or respirators to control copper levels to below TLV as stated in Section 2.

**SECTION 9. PHYSICAL AND CHEMICAL DATA**

Appearance:	Clear blue liquid.
Odor:	Mild.
pH:	1.0
Vapor Pressure:	0.1 mm @ 68°F.
Vapor Density (Air=1):	1.0.
Boiling Point:	220°F.
Freezing Point:	Not available.
Water Solubility:	Complete.
Density:	9.6-10.0 lbs./gal.
Evaporation Rate:	Not available
Viscosity:	Not available.
% Volatile:	Not available.
Octanol/Water Partition Coefficient:	Not available.
Saturated Vapor Concentration:	Not available.

**SECTION 10. STABILITY AND REACTIVITY**

Stability:	Stable.
Conditions To Avoid:	Avoid mixing with strong bases and strong reducing agents.
Incompatibility:	Avoid contact with strong oxidizers. Do not use with materials or equipment sensitive to acidic solutions. May react with most metals to produce hydrogen gas, which can form an explosive mixture with air.
Hazardous Decomposition Products:	At elevated temperatures, product will decompose generating oxides of sulfur.
Hazardous Polymerization:	Will not occur.

**SECTION 11. POTENTIAL HEALTH EFFECTS**Acute Effects:

Eyes:	Corrosive. Exposure may cause severe burns, destruction of eye tissue and possible permanent injury or blindness.
Skin:	Corrosive. Contact may cause reddening, itching, inflammation, burns, blistering and possibly tissue damage.
Ingestion:	Corrosive. May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection.
Inhalation:	Irritating. Overexposure may cause burns and tissue damage.
Acute /Chronic Toxicity:	Continued overexposure to this solution may cause systemic toxicity.

**SECTION 12. ECOLOGICAL INFORMATION**

Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Keep out of streams, ditches, etc. due to pH lowering effect and metal and salt constituents.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

**SECTION 13. DISPOSAL**

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

**SECTION 14. TRANSPORTATION****D.O.T. Shipping Description:**

<7 gals. Motor Vehicle / Railcar: Not Regulated – DOT corrosive to aluminum and/or steel (not skin). Not regulated if transported by motor vehicle or rail car in a packaging that will not react dangerously or be degraded by this material [See 49 CFR §173.154(d)].

Air / Vessel: Regulated

UN 3264, Corrosive liquid, acidic, inorganic, n.o.s. (contains cupric sulfate), 8, PG III.

>7 gals. Motor Vehicle / Railcar: Regulated – UN 3082, Environmentally hazardous substance, liquid, n.o.s. (contains cupric sulfate), 9, PG III, RQ 10 Lbs.

See exception above, but packages >7 gallons trigger the RQ and the Class 9 status.

Air / Vessel: Regulated – Corrosive liquid, acidic, inorganic, n.o.s. (contains cupric sulfate), 8, UN 3264, PG III, RQ 10 Lbs.

Other Shipping Information: Compounds, Water Treating, Liquid.  
(NMFC Item 50313, LTL Class 65)

**SECTION 15. REGULATORY INFORMATION**

CERCLA: This product contains copper sulfate and sulfuric acid. Sulfuric acid and Copper and its compounds are listed as priority pollutants under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements of 40 CFR 302.

SARA TITLE III, Section 313 Toxic Chemicals: Copper compounds (19-21%); Sulfuric acid (10.75-13.5%)

PROPOSITION 65 (CA): None.

**SECTION 16. OTHER**

While the information contained herein is based on data considered accurate and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act, it is provided for guidance only. Brandt Consolidated, Inc. does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations; in so doing, user assumes all risk in use of the material. The information contained herein is not to be taken as a warranty or representation for which Brandt Consolidated, Inc. assumes legal responsibility.