

WARD'S MATERIAL SAFETY DATA SHEET

WARD'S 89769
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MSDS No. BB 90
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SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	BENEDICT'S REAGENT, QUALITATIVE SOLN.
Chemical Synonyms	Benedict's Sugar Test Reagent
Formula	Mixture See Section II
Unit Size	up to 4 Lt.
C.A.S. No.	Mixture See Section II

NFPA HAZARD RATING
 LEAST SLIGHT MODERATE HIGH EXTREME
 0 1 2 3 4

CHEMTREC
 800-424-9300
 Day 716-226-6177

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Cupric Sulfate (CAS No. 7756-98-7)	1.5%	See Section V.
Sodium Carbonate (CAS No. 497-19-8)	8.7%	None established.
Sodium Citrate (CAS No. 68-04-2)	15.1%	None established.
Water (CAS No. 7732-18-5)	75%	None established.

CAUTION! MAY BE HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	N/A	Specific Gravity (H ₂ O = 1)	1.145 at 20°C
Boiling Point (°F)	Approx. 110-120°C (230-248°F)	Percent Volatile by Volume (%)	75%
Vapor Pressure (mm Hg)	14 mm (water)	Evaporating Rate (Either)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, light blue, water solution; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA)	Flammable Limits in Air % by Volume	Lower ----- Upper -----
Extinguisher Media	Use any media suitable for extinguishing the supporting fire.		

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

When heated to decomposition, it burns and emits acid fumes.

D.O.T. **NON-REGULATED.**
 Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value
 None established. TWA COPPER As fume 0.2 mg/m³, dust and mists 1 mg/m³. (ACGIH 1992-93).

Effects of Overexposure
EYES: Contact with solution may cause eye irritation. **SKIN:** Prolonged or repeated skin contact may cause irritation. **INGESTION:** May be harmful if swallowed. **INHALATION:** As mist may cause irritation to respiratory tract.

Emergency and First Aid Procedures
EYES: Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink and call a physician immediately. Never give anything by mouth to an unconscious person. **INHALATION AS MIST:** Remove to fresh air. Treat symptomatically. If discomfort or illness develops, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature and heat.
Incompatibility (Materials to Avoid)	Stable	X	Acids and strong oxidizers.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled
 Thermal decomposition or burning may produce carbon dioxide and/or carbon monoxide.
 Absorb spill in vermiculite, sand, earth, paper towel and place in a suitable container for disposal. Wash spill area with soap and water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)
 None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved respirator.

Ventilation
 Local Exhaust: None required. Special No.
 Mechanical (General): None required. Other No.

Protective Gloves
 Rubber. **Eye Protection**
 Chemical safety glasses.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing
 Store in a cool, dry place away from acids and acid fumes. Wash thoroughly after handling. Remove and wash contaminated clothing. Keep container tightly closed when not in use.

Other Precautions
 Read label on container before using. Do not wear contact lenses when working with chemicals. Avoid contact with eyes and prolonged contact with skin. Wear proper protective clothing, eye shield during the use of this material in the event of splattering.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 6 | Date 2/24/98 | Approved Michael Raszela | Chemical Safety Coordinator MR

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