

**KEMTEC
EDUCATIONAL
CORPORATION**

MATERIAL SAFETY DATA SHEET

8944 Beckett Rd.
West Chester, OH 45069
(513) 860-4949
Fax (513) 682-8181

MSDS No. BB 203
Effective Date July 24, 1998

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	BROMOFORM
Chemical Synonyms	Tribromethane
Formula	CHBr ₃
Unit Size	up to 20 Lt.
C.A.S. No.	75-25-2



CHEMTREC
800-424-9300
Day 716-228-6177

NFPA
HAZARD RATING
LEAST SLIGHT MODERATE
0 1 2

Health	3
Fire	0
Reactivity	1
HMIS*	
HIGH EXTREME	3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Bromoform: (CAS No. 75-25-2)	96%	TWA: 0.5 ppm, 5.2 mg/m ³
Ethyl alcohol: (CAS No. 64-17-5)	4%	TWA: 1000 ppm, 1880mg/m ³
DANGER! LACHRYMATOR. TOXIC. HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN.		

SECTION III PHYSICAL DATA

Melting Point (°F)	8°C (46°F)	Specific Gravity (H ₂ O = 1)	2.889 @ 20°/4°C
Boiling Point (°F)	150°C (302°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	5 mm Hg @ 20°C	Evaporation Rate (Ether = 1)	0.56
Vapor Density (Air=1)	8.7		
Solubility in Water	0.1%		
Appearance & Odor	Colorless to yellow liquid; chloroform-like odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-combustible (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
Extinguisher Media	Use dry chemical, carbon dioxide, water spray, fog, regular foam.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved, self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

(1993 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.8, GUIDE PAGE NO. 58)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Negligible fire hazard.
When heated to decomposition may release irritating vapors.

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

ACGIH (1992-93): TWA 0.5 ppm, 5.2 mg/m³

Effects of Overexposure

INGESTION/INHALATION: Prolonged exposure to high vapor concentrations or repeated exposures to low vapor concentrations causes CNS depression and may result in liver or kidney injury and possibly cardiac sensitization. May cause headache, nausea, vomiting, dizziness, drowsiness, irritation of respiratory tract, and loss of consciousness. **EYES:** Contact with eyes causes irritation and may be painful. **SKIN:** Prolonged or repeated contact causes defatting and cracking of the skin.

Emergency and First Aid Procedures

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **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, do NOT induce vomiting. Call physician immediately. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

Stability	Unstable	Stable	Conditions to Avoid
		X	Open flame, excessive temperature and heat.
Incompatibility (Materials to Avoid)	Strong alkalies, oxidizers, alkali metals, metallic fines or powders, acetone, aluminum and magnesium.		
Hazardous Decomposition Products	Thermal decomposition may include toxic and corrosive fumes of bromides and oxides of carbon.		
Hazardous Polymerization	Conditions to Avoid		
May Occur	Will Not Occur	Not applicable.	
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Wear suitable protective clothing, absorb spilled material on vermiculite, sand, ground. Place in a fiber carton and incinerate. Wash spill area well with soap and water.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Dispose of in an approved incinerator equipped with an afterburner and scrubber or contract with a licensed disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	Work in fume hood. If needed wear a NIOSH/MSHA-approved respirator.			
Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.
Protective Gloves	Rubber.		Eye Protection	Chemical safety glasses.
Other Protective Equipment	Goggles and shield, lab coat and apron, vented hood, proper gloves, eye wash station.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool place, protect from light. Wash thoroughly after handling.

Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid breathing vapor. Use with adequate ventilation. Avoid contact with eyes, skin, clothing. Remove and wash contaminated clothing.

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

Revision No. 1	Date 7/24/98	Approved Michael Raszeja	Chemical Safety Coordinator MR
----------------	--------------	--------------------------	--------------------------------

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.