Language: EN Country:

**** MATERIAL SAFETY DATA SHEET ****

1-Bromo-3-chloropropane, 99%

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 1-Bromo-3-chloropropane, 99%

Catalog Numbers: 10686-0000, 10686-2500

Synonyms:

Trimethylene chlorobromide

Company Identification (Europe): Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Company Identification (USA):

Acros Organics One Reagent Lane Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

	CAS#	Chemical Name	**************************************	EINECS#	Haz Symbols	Risk Phrases	+
i	109-70-6	1-Bromo-3-chloropropane	99%	203-697-1			

Hazard Symbols: XN

Risk Phrases: 20/21/22 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye

Causes eye irritation. Causes redness and pain.

Skin:

Causes skin irritation. Harmful if absorbed through the skin. Ingestion:

Harmful if swallowed. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage.

Inhalation:

Chronic:

Not available.

**** SECTION 4 - FIRST AID MEASURES ****

Eves:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Ingestion:

Get medical aid. Wash mouth out with water.

 ${\tt Inhalation:}$

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:

**** 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. Combustible liquid.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

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General Information: Use proper personal protective equipment as indicated
                            in Section 8.
           Absorb spill with inert material (e.g. vermiculite, sand or earth),
           then place in suitable container.
                    **** SECTION 7 - HANDLING and STORAGE ****
     Handling:
          Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin
          and eyes.
     Storage:
           Keep away from sources of ignition. 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 ventilation to keep airborne concentrations low.
     Personal Protective Equipment
                  Eyes:
                        Wear chemical goggles.
                  Skin:
                         Wear appropriate protective gloves to prevent skin
              Clothing:
                         Wear appropriate protective clothing to prevent skin
           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:
                              Clear liquid
Color:
                              Not available.
                              chloroform-like - sweetish odor
Odor:
                              Not available.
Vapor Pressure:
                              6.6mbar @20 deg C
Viscosity:
                              Not available.
Boiling Point:
                              142 - 145 deg C
                              -59 deg C
Freezing/Melting Point:
Autoignition Temperature:
                              Not available.
Flash Point:
                              81 deg C ( 177.80 deg F)
Explosion Limits, lower:
                              Not available.
Explosion Limits, upper:
                              Not available.
Decomposition Temperature:
Solubility in water:
                              Insoluble.
Specific Gravity/Density:
                              1.590
Molecular Formula:
Molecular Weight:
                              C3H6BrCl
                              157.44
                  **** SECTION 10 - STABILITY AND REACTIVITY ****
     Chemical Stability:
          Stable under normal temperatures and pressures.
     Conditions to Avoid:
          Incompatible materials, heat.
     Incompatibilities with Other Materials:
          Oxidizing agents, strong bases, aluminum, magnesium, zinc.
     Hazardous Decomposition Products:
           Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide,
          hydrogen bromide.
     Hazardous Polymerization: Will not occur.
                 **** SECTION 11 - TOXICOLOGICAL INFORMATION ****
     RTECS#:
          CAS# 109-70-6: TX4113000
     LD50/LC50:
           CAS# 109-70-6: Inhalation, rat: LC50 = 5668 mg/m3; Inhalation, rat:
           LC50 = 6500 \text{ mg/m}3/4\text{H}; Oral, mouse: LD50 = 1290 \text{ mg/kg}; Oral, rat:
          LD50 = 930 mg/kg.
Skin, rat: LD50 = 1600 mg/kg
Inhalation, rat: LC50 = 6.5 \text{ mg/}1/4\text{H}
     Carcinogenicity:
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: Hq

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**** SECTION 12 - ECOLOGICAL INFORMATION ****
     Ecotoxicity:
           Fish: Goldfish: LC50: 75 mg/l: 24 H: .Log Pow: 2.18
                   **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Dispose of in a manner consistent with federal, state, and local regulations.
                     **** SECTION 14 - TRANSPORT INFORMATION ****
     IATA
           Shipping Name: 1-BROMO-3-CHLOROPROPANE
            Hazard Class: 6.1
                UN Number: 2688
           Packing Group: III
     TMO
           Shipping Name: 1-BROMO-3-CHLOROPROPANE
            Hazard Class: 6.1
               UN Number: 2688
           Packing Group: III
     RID/ADR
           Shipping Name: 1-BROMO-3-CHLOROPROPANE
            Hazard Class: 6.1
               UN Number: 2688
           Packing group: III
                     **** SECTION 15 - REGULATORY INFORMATION ****
 European/International Regulations
     European Labeling in Accordance with EC Directives
           Hazard Symbols: XN
           Risk Phrases:
                          R 20/21/22 Harmful by inhalation, in contact with
                          skin and if swallowed. 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 36/37/39 Wear suitable protective clothing, gloves
                          and eye/face protection.
                          S 45 In case of accident or if you feel unwell, seek
                          medical advice immediately (show the label where
                          possible).
   WGK (Water Danger/Protection)
           CAS# 109-70-6: 3
   United Kingdom Occupational Exposure Limits
   United Kingdom Maximum Exposure Limits
           CAS# 109-70-6 is listed on Canada's DSL List.
           CAS# 109-70-6 is listed on Canada's Ingredient Disclosure List.
   Exposure Limits
           CAS# 109-70-6: OEL-RUSSIA:STEL 3 mg/m3
 US FEDERAL
     TSCA
           CAS# 109-70-6 is listed on the TSCA inventory.
                     **** SECTION 16 - ADDITIONAL INFORMATION ****
     MSDS Creation Date: 10/08/1998 Revision #1 Date: 10/28/2003
     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 way 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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