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Language: EN
Country:
                        **** MATERIAL SAFETY DATA SHEET ****
  Carbamylcholine chloride, 99%
         **** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****
MSDS Name: Carbamylcholine chloride, 99%
Catalog Numbers:
     10824-0000, 10824-0100, 10824-0250, 10824-1000
Synonyms:
Carbachol; (2-Hydroxyethyl)trimethylammonium chloride carbamate
Company Identification (Europe): Acros Organics BVBA
                                       Janssen Pharmaceuticalaan 3a
                                       2440 Geel, Belgium
Company Identification (USA):
                                       Acros Organics
                                       One Reagent Lane
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For information in Europe, call: 0032(0) 1457:
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299
           **** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****
                                                                  % | EINECS# |Haz Symbols| Risk Phrases |
             Chemical Name
       CAS#
        51-83-2 |Carbamylcholine chloride
                                                                 99% | 200-127-3 |||
           Hazard Symbols: T
           Risk Phrases: 25
                    **** SECTION 3 - HAZARDS IDENTIFICATION ****
                                   EMERGENCY OVERVIEW
Toxic if swallowed. Hygroscopic (absorbs moisture from the air).
Potential Health Effects
     Eye:
           May cause eye irritation.
      Skin:
           May cause skin irritation.
      Ingestion:
           Poison by ingestion.
      Inhalation:
           May cause respiratory tract irritation. The toxicological properties
     Not available.
                       **** SECTION 4 - FIRST AID MEASURES ****
           Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid
           immediately.
           Get medical aid immediately. Immediately flush skin with plenty of
           water for at least 15 minutes while removing contaminated clothing
           and shoes.
      Ingestion:
           Get medical aid immediately. Wash mouth out with water.
      Inhalation:
     Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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.
     Extinguishing Media:
Use water spray, dry chemical, carbon dioxide, or chemical foam.
                  **** 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.
                     **** SECTION 7 - HANDLING and STORAGE ****
           Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.
      Storage:
           Store in a cool, dry place. Store in a tightly closed container.
           *** SECTION 8 - EXPOSIBE CONTROLS, PERSONAL PROTECTION ****
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Use adequate ventilation to keep airborne concentrations low.
      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 {\tt 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 ****
                                    Crystalline powder white
Physical State:
                                    odorless
Odor:
                                    Not available.
pH:
Vapor Pressure:
Viscosity:
Boiling Point:
                                    Not available.
Not available.
200 - 204 deg C
Freezing/Melting Point:
Autoignition Temperature:
                                    Not available.
Flash Point:
                                    Not available.
                                   Not available.
Not available.
>210 deg C
1 g/ml water
Explosion Limits, lower:
Explosion Limits, upper:
Decomposition Temperature:
Solubility in water:
Specific Gravity/Density:
Molecular Formula:
                                    H2NCO2CH2CH2N(CH3)3Cl
Molecular Weight:
                                   182.65
                      **** SECTION 10 - STABILITY AND REACTIVITY ****
      Chemical Stability:
            Not available.
      Conditions to Avoid:
   Incompatible materials.
Incompatibilities with Other Materials:
   Strong oxidizing agents.
      Hazardous Decomposition Products:
Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.
      Hazardous Polymerization: Has not been reported.
                    **** SECTION 11 - TOXICOLOGICAL INFORMATION ****
             CAS# 51-83-2: GA0875000
      LD50/LC50:
CAS# 51-83-2: Oral, mouse: LD50 = 15 mg/kg; Oral, rat: LD50 = 40
      mg/kg.
Carcinogenicity:
         Carbamylcholine chloride -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.
                       **** SECTION 12 - ECOLOGICAL INFORMATION ****
                      **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Dispose of in a manner consistent with federal, state, and local regulations.
                      **** SECTION 14 - TRANSPORT INFORMATION ****
      IATA
             Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.* Hazard Class: 6.1
                 UN Number: 2811
             Packing Group: II
      IMO
             Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.
              Hazard Class: 6.1
UN Number: 2811
             Packing Group: II
      RID/ADR
Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.
              Hazard Class: 6.1
UN Number: 2811
             Packing group: II
                       **** SECTION 15 - REGULATORY INFORMATION ****
 European/International Regulations
      European Labeling in Accordance with EC Directives
Hazard Symbols: T
             Risk Phrases:
                              R 25 Toxic if swallowed.
             Safety Phrases:
S 28A After contact with skin, wash immediately with
                              plenty of water.
S 45 In case of accident or if you feel unwell, seek
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Engineering Controls:

medical advice immediately (show the label where possible). WGK (Water Danger/Protection)
CAS# 51-83-2: No information available. United Kingdom Occupational Exposure Limits United Kingdom Maximum Exposure Limits Canada

CAS# 51-83-2 is listed on Canada's NDSL List. CAS# 51-83-2 is not listed on Canada's Ingredient Disclosure List. Exposure Limits US FEDERAL TSCA

CAS# 51-83-2 is listed on the TSCA inventory.

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 10/25/1996 Revision #0 Date: Original.

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