

# MATERIAL SAFETY DATA SHEET

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**PRODUCTS:** Carbamates Test Mixture  
**Cat. No.** 1700-0063

## Section I – General

**FORMULA and CAS #:** Aldicarb sulfoxide, aldicarb sulfone [1646-88-4], oxamyl [2135-22-0], methomyl [16752-77-5], 3-hydroxycarbofuran, aldicarb [116-06-3], propoxur [114-26-1], carbofuran [1563-66-2], carbaryl [63-25-2], 1-naphthol [90-15-3], methiocarb [2032-65-7], 4-bromo-3,5-dimethyl-phenyl-N-methylcarbamate; 2.5µg/mL each in methanol [67-56-1]

**CHEMICAL NAME:** Carbamates dissolved in methanol  
**CHEMICAL FAMILY:** N-methyl carbamates (urethane), alcohol

## Section II – Hazardous Ingredients

1: TOXIC Class I & II; DANGER; WARNING: contains 2.5 µg/mL of each of eleven carbamates and 1-naphthol in methanol

## Section III – Physical Data

**VAPOR PRESSURE:** 97 mm Hg @ 20°C  
**BOILING POINT:** 65°C (approximately)  
**APPEARANCE:** Clear solution  
**% VOLATILITY BY VOLUME:** 99+  
**SOLUBILITY:** Methanol solution (miscible with water)

## Section IV – Toxicity Data

**RTECS #:** Not applicable  
**RTECS NAME:** Not applicable  
**TOXICITY:** Toxicity data are for pure carbamates; the calibration standard contains 2.5µg/mL of each carbamate in methanol. Aldicarb (rat): oral LD<sub>50</sub> 1mg/kg; oxamyl (rat): oral LD<sub>50</sub> 5.4mg/kg; propoxur (rat): oral LD<sub>50</sub> 50mg/kg; aldicarb sulfone (rat): oral LD<sub>50</sub> 25mg/kg; methanol (rat): oral LD<sub>50</sub> 5,628mg/kg  
**REVIEWS:** Please refer to Registry of Toxic Effects of Chemical Substances (RTECS) for complete information.

## Section V – Health Hazards and First Aid

**ACUTE EFFECTS:** Can be fatal if absorbed through skin; can be fatal if inhaled; can be fatal if swallowed; can cause liver and kidney injury; may cause seizures, nausea, vomiting, air way obstruction and increased mucous secretions in the lungs  
**CHRONIC EFFECTS:** Cholinesterase inhibitor, cause kidney injury, cause nervous system injury

- EYE CONTACT:** Flush with plenty of water for at 15–20 minutes; assure adequate flushing by separating eyelids with fingers. Get medical attention immediately.
- SKIN CONTACT:** Wash with water for 15–20 minutes. If no burns have occurred, use soap and water to cleanse skin.
- INHALATION:** Remove to fresh air. If breathing becomes difficult, give oxygen. If not breathing, give artificial respiration. If patient is cardiac arrest, administer CPR. Continue life support measures until medical assistance arrives.
- INGESTION:** Rinse mouth with water insuring rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomiting by touching finger to back of victim's throat. Do not administer water or induce vomiting to an unconscious or convulsing person. If patient is in shock, keep warm & quiet. Get medical attention. **ANTIDOTE: atropine sulfate** in large therapeutic doses; repeat as necessary to the point of tolerance. Do not use 2-PAM (pralidoxime chloride); do not use cholinesterase inhibiting drugs; do not use morphine.

### **Section VI – Fire and Explosion Hazards**

- FLASHPOINT:** 12°C (closed cup)
- EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical powder, water may be ineffective
- FIREFIGHTING PROCEDURE:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- UNUSUAL HAZARDS:** Very flammable liquid.
- EXPLOSIVE PROPERTIES:** Closed containers exposed to heat may explode.

### **Section VII – Reactivity**

- GENERAL:** Stable
- INCOMPATIBILITIES:** Primary amines will cause non-hazardous contamination of the material.
- HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:** Carbon dioxide and carbon monoxide.

### **Section VIII – Spill or Leak Procedures**

- SPILL PROCEDURE:** Wear eye protection and heavy rubber gloves. Soak up spill with rags, paper towels, sponge, etc., and hold for waste disposal. Ventilate area and wash spill-site with soap and water after material pickup is complete.
- WASTE DISPOSAL:** Burn in a chemical incinerator equipped with an afterburner and scrubber. Comply with all federal, state, and local regulations.

### **Section IX – Precautions for Handling and Storage**

- SAFETY EQUIPMENT:** Safety goggles, vinyl / latex / or rubber gloves, safety shower with eye-wash
- HANDLING PROCEDURES:** Avoid eye and skin contact. Do not ingest. Wear safety glasses & gloves
- STORAGE PROCEDURES:** Store at  $\leq 4^{\circ}\text{C}$

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