PRODUCT NAME: BENCO #87 INDUSTRIAL PAINT REMOVER

1. PRODUCT INFORMATION:
   General or Generic ID: Chlorinated Hydrocarbon
   Alcohol Blend
   Trade Name: Benco #87
   Hazard Classification: Corrosive Liquid
   DOT Shipping Name: Paint Related Material, Corrosive Liquid, NA1760

2. HAZARDOUS COMPONENTS:
   INGREDIENT: PEL (ACGIH)
   Methylene Chloride 100 ppm
   Methanol 200 ppm
   Biodegradable Wetting Agents & Wax N/A

3. PHYSICAL DATA:
   Boiling Point: 104 Degrees
   Vapor Pressure: <300 mm Hg
   Vapor Density: 2.93 (air = 1)
   Specific Gravity: 1.290
   Appearance: Colorless liquid
   Solubility in Water: Emulsifies
   Percent Volatile by Volume: 95%
   Odor: Typical Methylene Chloride

4. FIRE AND EXPLOSION HAZARD DATA:
   Flash Point: None
   Flammable Limits: LFL: 13% @ 25C  UFL: 23% @ 25C
   Extinguishing Media: Water fog
   Fire & Explosion Hazards: May form flammable vapor-air mixtures at
temperatures above ambient. Lower temperatures increase the
difficulty of ignition.
   Fire-fighting Equipment: Wear positive pressure self contained
respiratory equipment.

5. HEALTH HAZARD DATA:
   EFFECTS OF OVEREXPOSURE:
   Eyes: Can cause severe irritation and slight corneal injury. Vapors may
also irritate eyes. Injury intensifies with extended contact.
   Skin: Prolonged or repeated exposure will cause a burn. The burn will
intensify with repeated contact.
   Skin Absorption: A single prolonged exposure is not likely to result in
the material being absorbed through skin in harmful amounts.
   Ingestion: Can cause gastrointestinal irritation, nausea, vomiting,
diarrhea, blindness, and even death. If aspirated (liquid enters the
lung), may be rapidly absorbed through the lungs and result in injury
to other body systems.
   Inhalation: Minimal anesthetic or narcotic effects may be seen in levels
of 500-1000 ppm methylene chloride. Progressively higher levels over
1000 ppm can cause dizziness or drunkenness. Concentrations as low as
10,000 ppm can cause unconsciousness and death. These high levels may
also cause cardiac arrhythmias. Excessive low level exposures may
cause irritation to upper respiratory tract and carboxyhemoglobinemia,
thereby impairing the blood’s ability to transport oxygen.
   In confined or poorly ventilated areas, vapors can readily accumulate
and cause unconsciousness or death.
   Notice: Reports have associated repeated and prolonged overexposure to
solvents to permanent brain and nervous system damage. Persons thought
to have heart or respiratory problems should seek medical advice
before using solvents of any kind. If signs of allergy develop
(breathing difficulty, eye itching, prolonged itching and redness of
the skin, headaches, dizziness, etc.) discontinue use of this product
immediately and consult a physician. Drinking alcohol before, during,
or after exposure to solvents may cause undesirable effects.

FIRST AID:
   Eyes: Flush with large amounts of water, lifting upper and lower lids
   occasionally. Get medical attention.
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Sweat: Wash off in flowing water or shower. Remove contaminated clothing and wash before reuse.
Ingestion: Call physician, poison control center, or hospital emergency room IMMEDIATELY.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Medical Conditions Aggravated By Exposure: Acute and chronic liver and kidney disease, chronic lung disease, anemia, coronary disease or rhythm disorders of the heart.

TOXICITY:
Chronic Toxicity: Chronic exposures to methylene chloride have caused liver and kidney disease in experimental animals.
Carcinogenicity: Methylene Chloride has been evaluated for possible cancer causing effects in laboratory animals. Inhalation studies at concentrations of 1,000, 2,000, and 4,000 ppm increased the incidence of malignant liver and lung tumors in mice. Three inhalation studies of rats have shown increased incidence of benign mammary gland tumors in female rats in concentrations of 1,500 ppm and above. Rats exposed to 50 and 200 ppm via inhalation showed no increased incidence of tumors. Mice and rats exposed by ingestion at levels up to 250 mg/kg/day lifetime and hamsters exposed via inhalation to concentrations up to 3,500 ppm lifetime did not show an increased incidence of tumors.
The International Agency for Cancer Research considers liver and lung tumors in mice as limited evidence of animal carcinogenicity. The significance of benign mammary gland tumors is unknown. Epidemiology studies of 751 humans chronically exposed to methylene chloride in the workplace for a minimum of 20 years did not demonstrate any increase in deaths caused by cancer or cardiac problems. A second study of 21227 workers confirmed these results. Methylene chloride has been identified as an animal carcinogen by NTP, but is not on the IARC or OSHA lists, as of May 31, 1987.

Reproductive Toxicity: Reproductive toxicity tests have been conducted to evaluate the adverse effects methylene chloride may have on reproduction and offspring of laboratory animals. The results indicate that methylene chloride does not cause birth defects in laboratory animals.

6. REACTIVITY DATA:
Hazardous Polymerization: Can not occur.
Stability: Stable.
Incompatibility: Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products: Open flames or welding arc can cause thermal degradation with the evolution of hydrogen chloride and very small amounts of phosgene and chlorine.

7. SPILL OR LEAK PROCEDURES:
Action to Take for Spills or Leaks:
Small Spills: mop up, wipe up, or soak up immediately. Remove to out of doors.
Large Spills: evacuate area. Contain liquid and transfer to closed metal or high density polyethylene containers. Keep out of water supply.
Disposal Method: Evaporate small quantities in compliance with local, state, and federal regulations. Large quantities may be sent to a licensed reclaimer. Contaminated absorbent material or any contaminated solids are considered hazardous waste and must be disposed of at an approved landfill or incinerator in compliance with local, state, and federal regulations. Do not dispose of this material or any waste residue of this material into septic systems, storm drains, or directly onto the ground.

8. HANDLING PRECAUTIONS:
Exposure Guideline: ACGIH TLV is 100 ppm. OSHA PEL is 500 ppm. ACGIH PEL is 100 ppm. CAL OSHA PEL is 180 ppm.
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VENTILATION: Controlling airborne concentrations below the ACGIH TLV exposure guideline is recommended. Use only with adequate ventilation. Local exhaust ventilation is necessary for most operations. Lethal concentrations may exist in areas with poor ventilation.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. If this level is exceeded, use an approved air-purifying respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus.

Skin Protection: Wear chemical-resistant rubber gloves, apron, boots, and plastic arm sleeves.

Eye Protection: Use safety glasses. Where contact is likely use chemical splash goggles.

9. ADDITIONAL INFORMATION:

Special precautions to be taken in Handling and Storage: Exercise reasonable care and caution. Avoid breathing vapors. Store in a cool place out of direct sunlight. Concentrated vapors of this product are heavier than air and will collect in low areas such as pits and degreasers, storage tanks, and other confined areas. Do not enter those areas where vapors of this product are suspected unless special breathing apparatus is used and an observer is present for assistance. Do not pressure product out of container with air. When opening cramped, open bung partially and vent any accumulated pressure before removing bung completely. Empty product containers may contain liquid or vapor residues of this product. All precautions suggested in this data sheet apply to empty containers also. Empty containers are property of Benco Sales, Inc. and should not be sold to individuals or other parties. Overexposure to this product can raise the level of carbon monoxide in the blood causing cardiovascular stress.

This Material Safety Data Sheet supersedes any previous Material Safety Data Sheet on this product. Effective date: April 11, 1988.

The information accumulated herein is given in good faith and believed to be accurate, but no warranty, expressed or implied, is made. Consult Benco Sales, Inc., for proper handling procedures in specific situations or for any other further information.