



# Hillyard Chemical Co.

MANUFACTURERS OF PROFESSIONAL FLOOR CARE PRODUCTS

January 24, 1989

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As part of our efforts to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200), we are enclosing Hillyard product Material Safety Data Sheet(s) in connection with your recent order.

Please let us know if you have any questions or need additional information.

**HILLYARD CHEMICAL COMPANY**

James G. Ross  
Technical Service Director

JGR:kf  
Encl.



# MATERIAL SAFETY DATA SHEET

#432

## SECTION I — IDENTITY AND MANUFACTURER'S INFORMATION

**Manufacturer's Name:** HILLYARD CHEMICAL CO.  
**Address:** 302 North Fourth Street  
St. Joseph, MO 64502

**Product Name:** KURL-OFF  
**Date Prepared:** April 13, 1988

**Emergency Telephone No.**  
**And Other Information Calls:** 816-233-1321

**Prepared by:** Regulatory Affairs Department

## SECTION II — HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity; Common Names(s))	CAS #'s	OSHA PEL	ACGIH TLV	Other Limits Recommended	%
Methylene chloride	75-09-2	500 ppm	100 ppm	N/A	90-95
Methyl alcohol	67-56-1	50 ppm	25 ppm	N/A	0.5-1

## SECTION III — PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point:** 115°F      **Specific Gravity (H<sub>2</sub>O = 1):** 1.2965  
**Vapor Pressure (mm Hg.):** no data      **Percent Volatile By Volume (%):** 95%  
**Vapor Density (AIR = 1):** Less than 1      **Evaporation Rate (ethyl ether = 1):** Less than 1  
**Solubility In Water:** Negligible      **Appearance & Odor:** Clear, thin liquid at 65°F; methylene chloride odor

## SECTION IV — FIRE AND EXPLOSION HAZARD DATA

**Flash Point (Method Used):** None (P.M.C.C.)      **Flammable Limits:** LEL - 5.5% UEL - No data

**Extinguishing Media:** Water fog, dry chemical, foam, carbon dioxide

**Special Fire Fighting Procedures:** Self-contained breathing equipment should be used by firemen in buildings where product is burning.

**Unusual Fire and Explosion Hazards:** Vapor can be ignited by high energy ignition source. Decomposes with fire or hot surface to acidic gases and other highly toxic substances.

## SECTION V — PHYSICAL HAZARDS

**Stability:** Stable? Yes      **Conditions to Avoid:** Methylene chloride may produce small amounts of hydrochloric acid when hydrolyzed with gross amounts of water contamination.

**Incompatibility (Materials to Avoid):** Aluminum; possibly sodium, potassium and magnesium. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions. Consult equipment supplier for more details.

**Hazardous Decomposition Products Or Byproducts:** Open flames and welding arcs can cause thermal degradation with the evolution of hydrogen chloride and very small amounts of phosgene and chlorine.

**Hazardous Polymerization:** Will Not Occur? Yes      **Conditions to Avoid:** N/A

## SECTION VI — HEALTH HAZARD DATA

**Route(s) of Entry:** Inhalation? Yes      Skin? possible, but unlikely      Ingestion? possible, but unlikely

**Health Hazards (1. Acute and 2. Chronic):** 1. Carbon monoxide formation in the body; exposure risk greater for smokers and individuals with heart disease. Inhalation — 900 ppm may cause dizziness, nausea, headaches; vomiting can occur above 2000 ppm.  
2. Prolonged gross excess or beyond 9000 ppm on methylene chloride may cause loss of consciousness and death.

**Chemical Listed as Carcinogen or Potential Carcinogen:**

National Toxicology Program? Yes\*      I.A.R.C. Monographs? No      OSHA? No  
\*animal test

**Signs and Symptoms of Exposure:** Contains methylene chloride which has been shown to cause cancer in certain laboratory animal tests. Risk to health depends upon level and duration of exposure. Excess skin contact has a tendency to dehydrate causing dermatitis of skin. Eye contact causes dehydration.

**Medical Conditions Generally Aggravated by Exposure:** Methylene chloride - acute and chronic liver and kidney disease, chronic lung disease, anemia, coronary disease or rhythm disorders of heart.

**Emergency and First Aid Procedures:** Ingestion: immediately give one or two glasses of water and call a physician, hospital emergency room or poison control center for way to induce vomiting. Eye contact: immediately flush thoroughly with water and call physician. Skin contact: wash thoroughly (wash clothing before reuse). Inhalation: remove to fresh air; if breathing stops use artificial respiration. Call physician.

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## SECTION VII — PRECAUTIONS FOR SAFE HANDLING AND USE

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**Steps To Be Taken In Case Material Is Released Or Spilled:** Provide adequate ventilation. Use approved air purifying respirator if needed to maintain ppm below exposure guidelines. Small spills: mop up, wipe up or soak up immediately. Remove to outdoors. Large spills: provide proper respiratory protection if necessary; contain liquid and transfer to closed metal container. Keep out of water supply.

**Waste Disposal Method:** Send to licensed reclaimer, permitted incinerators, or evaporate very small quantities in compliance with local, state and federal regulations including Subtitle C of the Resource Conservation and Recovery Act. Dumping into sewers, on the ground, or with any other body of water is strongly discouraged and may be illegal. Clean up rags, papers, and waste promptly.

**Precautions To Be Taken In Handling And Storing:** Avoid breathing vapors; store in cool place. Concentrated vapors of this product are heavier than air and collect in low areas. Store in sealed metal container; avoid contact with skin and eyes. Use this product outdoors, if possible. If you must use it indoors, open all windows and doors or use other means to ensure fresh air movement during application and drying. A dust mask **DOES NOT** provide protection against vapors. Do not use in basement or unventilated area.

**Other Precautions:** Consult federal, state or local disposal authorities for approved disposal procedures. Methylene chloride = waste #U080; Methanol = #U154

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## SECTION VIII — CONTROL MEASURES

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**Respiratory Protection (Specify Type):** Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use an approved air purifying respirator. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where exposure guidelines may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved positive pressure self-contained breathing apparatus. Wear appropriate, properly fitted respirator (NIOSH or MSHA approved) unless air monitoring demonstrates vapor is below applicable limits. Follow respirator manufacturer's directions.

**Ventilation:** Local Exhaust Recommended Mechanical (General) Recommended Special N/A Other N/A

**Protective Gloves:** Solvent resistant

**Eye Protection:** Chemical splash goggles or safety glasses

**Other Protective Clothing Or Equipment:** Protective clothing such as uniforms or coveralls. Use impervious clothes where frequent skin contact is a concern.

**Work/Hygienic Practices:** Do not eat, drink or smoke in work area. Wash hands prior to eating, drinking or using restroom.

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