

# Material Safety Data Sheet

#432

## SECTION I — IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name <b>HILLYARD CHEMICAL COMPANY</b>	Product Name <b>KURL-OFF</b>
Address <b>302 North Fourth Street St. Joseph, MO 64502</b>	Date Prepared <b>October 19, 1986</b>
Emergency Telephone No. And Other Information Calls <b>(816) 233-1321</b>	Prepared by <b>Regulatory Affairs Department</b>

## SECTION II — HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity: Common Name(s))	CAS #'s	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (Optional)
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)	> 1	Evaporation Rate (ethyl ether = 1)	> 1
Solubility in Water	negligible	Appearance and 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	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>	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	May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	Conditions To Avoid N/A
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**SECTION VI - HEALTH HAZARD DATA**

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

Health Hazards (1. Acute and 2. Chronic)

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.

Prolonged gross excess or beyond 9000 ppm on methylene chloride may cause loss of consciousness and death.

Chemical Listed as Carcinogen  National Toxicology Program  Yes \* No  I.A.R.C. Monographs Yes  No  OSHA Yes  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 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.

Artificial respiration. Call physician.

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

Steps To Be Taken In Case Material Is Released Or Spilled

Provide adequate ventilation. Use approved air purifying respirator if needed to maintain

concentration below exposure guidelines. Small spills: mop up, wipe up or soak up immediately. Re-

move 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.

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 container; avoid contact with skin and eyes.

Other Precautions

Consult federal, state or local disposal authorities for approved disposal procedures.

Methylene chloride = waste #U080; Methanol = #U154

**SECTION VIII - CONTROL MEASURES**

Respiratory Protection (Specify Type) \* Wear appropriate, properly fitted respirator (NIOSH or MSHA approved)

unless air monitoring demonstrates vapor is below applicable limits. Follow resp. mfg.

Local Exhaust	Mechanical (General)	Special	Other directions
<u>recommended</u>	<u>recommended</u>	<u>N/A</u>	<u>N/A</u>

Protective Gloves Chemical 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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