

DATE PREPARED: 8-10-92

PRODUCT NAME: **PERMA PATCH**
 DESCRIPTION: For chemicals, coatings and related materials in compliance with OSHA 29 CFR 1910.1200

MANUFACTURER

NAME: PIONEER RESEARCH CORP.
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 EMERGENCY TELEPHONE: 1-800-255-3924

SECTION I. PRODUCT

NUMBER:	HD-0022-B.MSD	H M I S Hazard Codes	
NAME:	Katalyst 41/22 BLEND	Health:	3 Serious
CLASS:	Epoxy Hardener	Flammability:	1 Slight
		Reactivity:	0 Minimal
		Personal Protective Equipment:	H

SECTION II. HAZARDOUS INGREDIENTS

Ingredient Material Description	Percent by weight	C.A.S. Registry No.	LEL	Vapor Pressure mm Hg @ 20 C
Modified Aliphatic Amine	50.0	*800920-5151	1.4	1.0
Modified Aliphatic Amine	25.0	*800920-5183	1.4	0.99
Nonionic Surfactant	25.0	*800920-5015	N/A	0.9

SECTION III. PHYSICAL DATA

Boiling Range:	N/A to N/A deg	Freezing Point:	N/A deg F
Vapor Pressure:	0.9 mm @ 20 deg C	Vapor Density:	7.59 (Heavier than air)
Specific Gravity:	0.98	H2O Solubility:	Negligible (0.1%)
Evaporation Rate: (relative to n-butyl acetate)	Slower	% Volatile by Volume	N/A %
Appearance and Odor:	Amber Liquid, Amine Odor		

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

Flash point: 250. deg F
 (Method Used) Pensky-Martens
Flammability Classification: Explosive Limits: LEL 1.4 UEL (%V in air) N/A
 OSHA: Combustible Liquid - Class III B
 DOT: Not regulated
Extinguishing Media: Water, Fog, Foam, Alcohol Foam, Carbon Dioxide (CO2), Dry Chemical
Special Fire Fighting Procedures: Use water fog to cool containers.
 Wear protective clothing. Fight fire from a safe distance. Close all valves to the area. Shut off all power to the area. Emergency lights must be turned on. Se contained breathing apparatus to be used. Do **NOT** spray pool fires directly. Under fire conditions irritating and/or toxic gases may be present. Combustion products may be toxic.
Unusual Fire and Explosion Hazards:

SECTION V. TOXICOLOGICAL INFORMATION

Ingredient Material Description	OSHA	ACGIH		LD50 (mg/kg)		LC50 (ppm)
	PEL	TLV (twa)		(rat)	(rbt)	(rat)
		mg/m3	ppm	ORAL	DERMAL	INHAL
Modified Aliphatic Amine	N/A	N/A	N/A	2330.	1000.	N/A
Nonionic Surfactant	N/A	N/A	N/A	1620.	2140.	N/A

SECTION VI. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUES: See Section V

EFFECTS OF OVEREXPOSURE: Vapors may irritate the eyes. Vapors may irritate respiratory tract. Skin may become dry. Contact irritating to eyes. May cause skin sensitization and other allergic responses. Severe skin irritation may occur. May cause Blindness or Permanent Eye injury. May cause severe eye burns. May cause severe skin burns. Harmful if swallowed. Harmful if absorbed through skin. If liquid is heated, avoid breathing vapors. Corneal damage can occur and injury is slow to heal, if not treated.	EMERGENCY AND FIRST AID PROCEDURES: Move to fresh air. Apply artificial respiration, if necessary. Wash skin with soap and water or waterless hand cleaners. Remove contaminated clothing. Call physician immediately. Do NOT induce vomiting.
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Drink large quantities of water immediately.
 Flush eyes with water for 15 minutes, get medical attention.
 Drink large quantities of milk mixed with salt.

Never give anything by mouth to an unconscious person.
 If swallowed, contact physician immediately.
 If breathing is difficult, oxygen may be given.

SECTION VII. REACTIVITY DATA

Stability: Stable

Stability Conditions To Avoid:

Incompatibility (Materials To Avoid Contact With): Strong oxidizing agents. Strong acids.
 Strong bases and/or Concentrated alkali. Aldehydes.
 Organic Halides. Peroxides.

Hazardous Decomposition Products: Oxides of carbon. Oxides of nitrogen.
 Toxic monomer fumes and/or short chain hydrocarbons.

Hazardous Polymerization: Will not occur.

Polymerization Conditions To Avoid:

SECTION VIII. SPILL OR LEAK PROCEDURES

Steps For Material Spillage: Absorb with sand and dispose of in an approved manner.
 Remove all sources of ignition. Wear protective clothing.
 Dike area with sand to contain spilled liquid.
 Prevent spillage from entering underground water systems.
 Ventilate area. Flush area with water but do **NOT** flush to sewer.
 Remaining material may be emulsified with soap and water and absorbed.
 Scoop up contaminated soil and place in dry drums.
 If transportation spill, call **1-800-255-3924**
 Large spills may be pumped into closed, but not sealed containers.

Waste Disposal Methods: Incinerate in approved manner.
 Dispose of in accordance with Local Regulations.

SECTION IX. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NESA/NIOSH approved respirator is highly recommended.
 Self-contained breathing apparatus in concentrations above PEL/TLV.
 Avoid breathing possible fumes, mists, and vapors which can cause severe respiratory damage. Always work in areas with adequate ventilation to allow dissipation of chemical fumes, and where applicable, solvent fumes.

Ventilation: Provide adequate cross air circulation.
 Exhaust at point of use. Mechanical in confined areas.

Protective Gloves: Gloves resistant to chemical penetration.
 Rubber, or Neoprene Gloves.

Eye Protection: Splashproof safety goggles. Chemical Worker Goggles. Chemical Splash Goggles.

Other Protective Equipment: Eyewash Station. Emergency Shower. Use of Barrier Cream Recommended. Chemical Apron, Rubber Foot Covering, Clean Long Sleeve & Leg Clothing.

SECTION X. SPECIAL PRECAUTIONS

Handling and Storage Precautions: Protect From Freezing.
 Overheating May Cause Container To Rupture.
 Store In A Cool Dry Place.
 Keep Away From Open Flames.
 Keep container closed when not in use.

Store in tightly closed containers.
 Store away from food and beverages.
 Store in a dry, well ventilated area.
 Wash thoroughly after handling.
 Wash before eating, drinking, smoking or using toilet.

Other Precautions: Check all containers for leaks.
 Wear protective clothing as in Section VIII.
 Avoid prolonged breathing or contact with skin.

Proprietary Ingredient - may be made available as provided in 29 CFR 1910.1200 (I). All our proprietary materials are on file with New Jersey Dept. of Health and the EIN number is provided.