

MATERIAL SAFETY DATA SHEET

DURAPOWER PATCH

NA - Not Applicable

NK - Not Known

NE - Not Established

NR - Not Required

Manufacturer's Information

DuraPower Products, Inc.			
Corporate Office:	752 Commercial Street San Jose, CA 95112-1408	Tel 408-441-6369 Fax 800-926-1060 E-mail Support@durapower.com	
Emergency Telephone:	408-441-6369	Contact Person:	Patrick Kelley
Product Name:	DuraPower Patch (Patch Kit)		
Product Number:	DPP-046, DPP-412, DPP-212, DPP-220		

Section 1 - Product Information

Common Name (Trade Name & Synonyms): DuraPower Patch	Chemical Family: Epoxy Polymercaptan
Chemical Name: Epoxy Resin (Part A) and Polymercaptan Hardener (Part B)	Cas Number: Mixture

Section 2 - Hazardous Ingredients

Hazardous Components (Chemical Identity, Common Name)	Cas #	%	AOGUI TLV (Units)	PEL (Units)
A (Resin)				
Diglycidyl Ether of Bisphenola	25068-38-6	100%	NA	NA
National Fire Protection Association codes: Health (NFPA) 1			Flammability (NFPA) 1	Reactivity (NFPA) 0
B (Liquid Epoxy Hardener)				
Polyoxypropylenediamine	9046-10-050-60		NE	NE
Tetraethylenepentamine	112-57-2	10-20	NE	NE
Triethylenetetramine	31295-46-2	10-20	NE	NE
Ethylenediamine	31295-54-2	10-20	NE	NE
National Fire Protection Association codes: Health (NFPA) 2			Flammability (NFPA) 1	Reactivity (NFPA) 0
Only those ingredients listed in this section have been determined to be hazardous as defined in 29 CFR 1910.1200. An ingredient marked with an asterisk(*) is also listed in 29 CFR 1910.1200 (D) #4 as a known or suspected carcinogen.				
Comments: None.				

Section 3 - Physical and Chemical Characteristics

	A	B		A	B
Boiling Point @760 mmHg (°C)	205	250	Specific Gravity @ 25°C	1.15	0.965
Vapor Pressure mmHg @ 25°C	1	<1	Volatile (% by Volume)	<0.01	<0.05
Solubility in Water	Insoluble	Complete	Vapor Density (Air=1) @ 25°C	NA	6.53
Evaporation Rate (BuAc=1)	NA	<0.001	Appearance	Low Viscosity	Clear
Order Colorless	Aromatic	Ammonia	Color	Clear	
Comments	None	None			
Note: The above information is not intended for use in preparing product specifications. Contact DuraPower Products before writing specifications.					

Section 4 - Fire and Explosion Data

	A	B		A	B
Flash Point (°F)	435	435	Method Used	TOC	TOC
Autoignition Temperature	Not Determined	Not Determined	Flammable Limits In Air % by volume	(LeI)NE	(UeI) NA
Extinguishing Media: Water spray, foam, CO ₂ , or dry chemical					
Special Fire Fighting Precautions/Procedures: Avoid breathing smoke. In confined areas, use full fire fighting equipment including NIOSH approved self-contained breathing apparatus. Cool fire-exposed containers with water.					
Unusual Fire and Explosion Hazards: Decomposition products may be toxic.					

Section 5 - Health Hazard Information

	A	B	
Threshold Limits Value	NE	NE	
ANSI Hazard Class	4	2	
Signs and Symptoms of Exposure:			
Acute Overexposure	Moderately irritating to skin & eyes. Possible skin sensitized.	Skin, eye and respiratory tract irritation.	
Chronic Overexposure	Pre-existing skin & eye disorders may be aggravated	Unknown	
Routes of Exposure:			
Inhalation	Not likely to produce adverse effect due to low volatility	Vapors may cause irritation of respiratory tract	
Ingestion	Low order of oral toxicity	Slightly toxic	
Skin Absorption	Not likely to be absorbed through skin in toxic amounts	Non-toxic	
Eye Contact	Moderately irritating	Mildly irritating	
Skin Contact	Moderately irritating May cause sensitization	Slightly irritating	
Carcinogenicity(A&B)	National Toxicology Program <u>No</u>	LARC Monographs <u>No</u>	OSHA <u>No</u>
Emergency and First Aid Procedures:			
Skin	Remove contaminated clothing. Wash from skin with soap and water. Launder clothing prior to re-use.		
Eye medical	Flush with large amounts of water for 15 minutes while holding eyelids open. Seek attention immediately.		
Inhalation	Remove victim to fresh air. Administer oxygen if necessary.		
Ingestion:	Do not induce vomiting. Give large doses of water. Seek medical attention.		

Section 6 - Reactivity Data

Stability	Conditions to Avoid
Unstable ___ Stable <u>Yes</u>	Elevated Temperatures
Incompatibility (Materials to Avoid):	
Strong oxidizing agents, strong acids and bases	
Hazardous Decomposition Products:	
Oxides of carbon and sulfur	
Hazardous Polymerization	Conditions to Avoid
May Occur ___ Will Not Occur <u>Yes</u>	Large mixes in bulk generate excessive heat due to exothermic reaction.

Section 7 - Spill or Leak Procedures

Steps To Be Taken If Material Is Spilled or Released:
Avoid contact with liquid and vapors. Wipe with a cloth or collect on absorbent material. Large spills: Dike & contain. Pump or shovel into salvage vessels.
Waste Disposal Method:
Cure, then bury or incinerate where permitted by federal, state & local regulations. Remove salvage vessels to a waste disposal site operating in compliance with federal, state and local regulations.

Section 8 - Special Protection Information

Respiratory Protection:			
For excessive vapors or to maintain below TLV limits. NIOSH (Specify type) approved respirator for organic vapors in compliance with 29 CFR 1910.134.			
Ventilation:	Local Exhaust	Mechanical (General)	Other
	<u>Yes</u>	<u>Yes</u>	
Protective Gloves		Eye Protection	
Impervious Rubber		Splash-proof chemical goggles	
Other Protective Clothing or Equipment:			
For prolonged exposure, impervious clothing and boots to minimize personal contact. Eye-wash station, safety shower.			

Section 9 - Special Precautions

	A	B
Warning Statements <i>(For industrial Use Only)</i>	May cause skin irritation Avoid contact with eyes	May cause skin irritation Avoid contact with eyes
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Precautions To Be Taken In Handling and Storage:		
Store in a cool, dry area in tightly closed containers. Avoid contact with skin & eye. Use with adequate ventilation. Use good hygiene practices.		
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Other Precautions:	RCRA Status:	Not considered to be a hazardous waste
	CERCIA Status:	Not Listed
	DOT Class:	Not regulated

This material safety data sheet (MSDS) has been prepared in compliance with the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty is expressed or implied concerning the accuracy of the information contained herein. It is the user's responsibility to determine the safety, toxicity and suitability of the product described herein. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

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