

## ITW PHILADELPHIA RESINS

EPCON CERAMIC 6 HARDENER

Revised: 11/17/2003

### MSDS Contents

- [1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION](#)
- [2. COMPOSITION/INFORMATION ON INGREDIENTS](#)
- [3. HAZARDS IDENTIFICATION](#)
- [4. FIRST AID MEASURES](#)
- [5. FIRE FIGHTING MEASURES](#)
- [6. ACCIDENTAL RELEASE MEASURES](#)
- [7. HANDLING AND STORAGE](#)
- [8. EXPOSURE CONTROLS/PERSONAL PROTECTION](#)
- [9. PHYSICAL AND CHEMICAL PROPERTIES](#)
- [10. STABILITY AND REACTIVITY](#)
- [11. TOXICOLOGICAL INFORMATION](#)
- [12. ECOLOGICAL INFORMATION](#)
- [13. DISPOSAL CONSIDERATIONS](#)
- [14. TRANSPORT INFORMATION](#)
- [15. REGULATORY INFORMATION](#)
- [16. OTHER INFORMATION](#)

### Item Number:

2G580, 4AL16, 4VM52, 9A939

### Mfg. Model Number:

C6-2, E-6, E6, ESK-401

ITW PHILADELPHIA RESINS

MATERIAL SAFETY DATA SHEET

PART NO. : 3600H

EPCON CERAMIC 6 HARDENER

THIS PRODUCT APPEARS IN THE FOLLOWING STOCK NUMBER(S) : 3600

LAST REVISED: 11/17/03

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADENAME: EPCON CERAMIC 6 HARDENER

### GENERAL USE:

THE FOLLOWING INFORMATION APPLIES TO THE HARDENER COMPONENT OF THE TWO-PART KIT AND TO FRESHLY MIXED RESIN AND HARDENER. AFTER CURING, THIS PRODUCT IS NOT HAZARDOUS.

CHEMICAL FAMILY: AMINE/MERCAPTAN POLYMER MIXTURE

### MANUFACTURER:

ITW PHILADELPHIA RESINS  
130 COMMERCE DR.

EMERGENCY INFORMATION:  
 EMERGENCY TELEPHONE NUMBER:  
 (CHEMTREC): (800) 424-9300  
 OTHER CALLS: (215) 855-8450

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS CONSTITUENT	ABBR.	CAS NO.	WEIGHT PERCENT	EXPOSURE LIMITS		
				ACGIH TLV	OSHA PEL	OTHER LIMITS
ISOPROPANOL	IPA	67630	< 1	400 PPM	400 PPM	400 PPM (CANADA)
2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL	DMP	90722	15-30	N/E	N/E	N/E
MERCAPTAN/AMINE BLEND		*	20-30	N/E	N/E	N/E

"TLV" MEANS THE THRESHOLD LIMIT VALUE EXPOSURE (EIGHT-HOUR, TIME-WEIGHTED AVERAGE, UNLESS OTHERWISE NOTED) ESTABLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS.

"STEL" INDICATES A SHORT-TERM EXPOSURE LIMIT.

"PEL" INDICATES THE OSHA PERMISSIBLE EXPOSURE LIMIT.

"N/E" INDICATES THAT NO EXPOSURE LIMIT HAS BEEN ESTABLISHED.

AN ASTERISK (\*) INDICATES A SUBSTANCE WHOSE IDENTITY IS A TRADE SECRET OF OUR SUPPLIER AND UNKNOWN TO US.

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## 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE, FORM, ODOR: VISCOUS, AMBER LIQUID WITH MERCAPTAN ODOR.

DANGER!

CORROSIVE. SEVERE EYE, SKIN, RESPIRATORY TRACT IRRITANT (EVIDENCED BY ITCHING, REDNESS, BURNING SENSATION). POTENTIAL SKIN SENSITIZER. OVEREXPOSURE MAY CAUSE DELAYED LUNG EFFECTS. AVOID BREATHING VAPORS. USE WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. WASH THOROUGHLY AFTER HANDLING.

POTENTIAL HEALTH EFFECTS:

PRIMARY ROUTES OF EXPOSURE:

- (X) SKIN CONTACT
- ( ) SKIN ABSORPTION
- (X) EYE CONTACT
- (X) INHALATION
- ( ) INGESTION

SYMPTOMS OF ACUTE OVEREXPOSURE:

SKIN:

CAN CAUSE SEVERE IRRITATION, ESPECIALLY ON PROLONGED CONTACT. POTENTIAL SENSITIZER.

EYES:

CAUSES SEVERE IRRITATION WITH POSSIBLE PERMANENT DAMAGE AND EVEN BLINDNESS.

INHALATION:

CONSIDERED SLIGHTLY TOXIC. CAN CAUSE IRRITATION OF RESPIRATORY TRACT. OVER EXPOSURE TO FUMES OR VAPORS MAY CAUSE DELAYED LUNG INJURY AND CHEMICAL PNEUMONIA.

INGESTION:

SLIGHTLY TOXIC. MAY CAUSE FATIGUE, MUSCLE WEAKNESS, GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

EFFECTS OF CHRONIC OVEREXPOSURE:

PROLONGED OR SEVERE OVEREXPOSURE TO DMP VAPOR CAN CAUSE DELAYED LUNG DAMAGE AND CHEMICAL PNEUMONIA. PROLONGED OR REPEATED CONTACT WITH THIS MATERIAL MAY CAUSE SKIN SENSITIZATION.

CARCINOGENICITY -

OSHA REGULATED:	NO
ACGIH:	NO
NATIONAL TOXICOLOGY PROGRAM:	NO
INTERNATIONAL AGENCY FOR RESEARCH ON CANCER:	NO

CANCER-SUSPECT CONSTITUENT(S): NONE

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE:

MAY AGGRAVATE EXISTING SKIN, EYE, AND LUNG CONDITIONS.

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## 4. FIRST AID MEASURES

FIRST AID FOR EYES:

FLUSH EYE WITH CLEAN WATER FOR AT LEAST 15 MINUTES WHILE GENTLY HOLDING EYELIDS OPEN. GET IMMEDIATE MEDICAL ATTENTION.

FIRST AID FOR SKIN:

IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND EXCESS CONTAMINANT. FLUSH SKIN WITH WATER. WASH THOROUGHLY WITH SOAP AND WARM WATER. CONSULT A PHYSICIAN IF IRRITATION DEVELOPS.

FIRST AID FOR INHALATION:

REMOVE PATIENT TO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS DIFFICULT. CONSULT A PHYSICIAN IF SYMPTOMS PERSIST.

FIRST AID FOR INGESTION:

DO NOT INDUCE VOMITING. GIVE LARGE AMOUNTS OF WATER FOLLOWED BY MILK IF AVAILABLE. CONSULT A PHYSICIAN.

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## 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

- WATER
- CARBON DIOXIDE
- DRY CHEMICAL
- FOAM
- ALCOHOL FOAM

FLASH POINT (DEG. F): >200

METHOD: PMCC

EXPLOSIVE LIMITS IN AIR (PERCENT) -

LOWER: N/D

UPPER: N/D

SPECIAL FIREFIGHTING PROCEDURES:

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING IN CONFINED AREAS. COOL CONTAINERS WITH WATER SPRAY

UNUSUAL FIRE AND EXPLOSION HAZARDS:

TOXIC SMOKE AND VAPORS MAY FORM DURING COMBUSTION.

HAZARDOUS PRODUCTS OF COMBUSTION:

OXIDES OF CARBON, OXIDES OF SULFUR, OXIDES OF NITROGEN.

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## 6. ACCIDENTAL RELEASE MEASURES

SPILL CONTROL:

AVOID PERSONAL CONTACT. ELIMINATE IGNITION SOURCES. VENTILATE AREA.

CONTAINMENT:

DIKE, CONTAIN AND ABSORB WITH CLAY, SAND OR OTHER SUITABLE MATERIAL.

CLEANUP:

FOR LARGE SPILLS, PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIAL AND DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE.

SPECIAL PROCEDURES:

PREVENT SPILL FROM ENTERING DRAINAGE/SEWER SYSTEMS, WATERWAYS, AND SURFACE WATERS.

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## 7. HANDLING AND STORAGE

HANDLING PRECAUTIONS:

AVOID CONTACT WITH SKIN, EYES, OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER USING AND PARTICULARLY BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR USING TOILET FACILITIES.

LAUNDER CONTAMINATED CLOTHING AND PROTECTIVE GEAR BEFORE REUSE. DISCARD CONTAMINATED LEATHER ARTICLES.

HANDLE MIXED RESIN AND HARDENER IN ACCORDANCE WITH THE POTENTIAL HAZARD OF THE CURING AGENT USED. PROVIDE APPROPRIATE VENTILATION/RESPIRATORY PROTECTION AGAINST DECOMPOSITION PRODUCTS (SEE SECTION 10) DURING WELDING/FLAME CUTTING OPERATIONS AND TO PROTECT AGAINST NUISANCE DUST DURING SANDING/GRINDING OF CURED PRODUCT.

STORAGE: STORE IN A COOL, DRY AREA AWAY FROM HIGH TEMPERATURES AND FLAMES.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION:

GENERAL MECHANICAL VENTILATION IS ADEQUATE FOR OCCASIONAL USE. FOR PROLONGED OR REPEATED USE, LOCAL EXHAUST IS RECOMMENDED.

OTHER ENGINEERING CONTROLS:

HAVE EMERGENCY SHOWER AND EYE WASH STATIONS AVAILABLE.

PERSONAL PROTECTIVE EQUIPMENT:

EYE AND FACE PROTECTION:

SAFETY GLASSES WITH SIDESHIELDS OR CHEMICAL GOGGLES.

SKIN PROTECTION:

CHEMICAL-RESISTANT RUBBER (FOR EXAMPLE, NEOPRENE, BUTYL RUBBER OR NITRILE) GLOVES AND OTHER PROTECTIVE GEAR AS NEEDED TO PREVENT SKIN CONTACT.

RESPIRATORY PROTECTION:

NONE NEEDED IN NORMAL USE WITH PROPER VENTILATION. IN POORLY VENTILATED AREAS OR WHEN CREATING A DUST OR MIST, USE NIOSH-APPROVED ORGANIC VAPOR RESPIRATOR.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY: 1.73

BOILING POINT (DEG. F): N/D

MELTING POINT (DEG. F): N/D

VAPOR DENSITY (AIR=1): N/D

VAPOR PRESSURE (MMHG): <<1 AT 70 DEG. F

EVAPORATION RATE (BUTYL ACETATE=1): N/D

VOC (GRAMS/LITER): 0

SOLUBILITY IN WATER: NEGLIGIBLE

PERCENT VOLATILE BY VOLUME: 0

pH (5% SOLUTION OR SLURRY IN WATER): 9.5

PERCENT SOLIDS BY WEIGHT: 100

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## 10. STABILITY AND REACTIVITY

THIS MATERIAL IS CHEMICALLY STABLE.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

CONDITIONS TO AVOID: OPEN FLAME AND EXTREME HEAT.

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS.

HAZARDOUS PRODUCTS OF DECOMPOSITION:

OXIDES OF CARBON, OXIDES OF SULFUR, OXIDES OF NITROGEN, AMMONIA.

CONDITIONS UNDER WHICH HAZARDOUS POLYMERIZATION MAY OCCUR:  
WHEN THIS HARDENER IS MIXED WITH AN EPOXY RESIN HEAT IS GENERATED; BE  
CAREFUL WHEN MIXING MORE THAN AN OUNCE OR SO.

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## 11. TOXICOLOGICAL INFORMATION

ACUTE ORAL EFFECTS:  
LD50 (RAT): NOT AVAILABLE.

ACUTE DERMAL EFFECTS:  
LD50 (RABBIT): NOT AVAILABLE.  
RABBIT: SEVERE IRRITANT

ACUTE INHALATION EFFECTS:  
LC50 (RAT): NOT AVAILABLE.  
EXPOSURE: 0 HOURS.

EYE IRRITATION:  
RABBIT: SEVERE IRRITANT.

SUBCHRONIC EFFECTS: NOT AVAILABLE.

CARCINOGENICITY, TERATOGENICITY, AND MUTAGENICITY: NOT AVAILABLE.

OTHER CHRONIC EFFECTS: NOT AVAILABLE.

TOXICOLOGICAL INFORMATION ON HAZARDOUS CHEMICAL CONSTITUENTS OF THIS  
PRODUCT:

CONSTITUENT	ORAL LD50 (RAT)	DERMAL LD50 (RABBIT)	INHALATION LC50 4HR, (RAT)
ISOPROPANOL	5045 MG/KG	12.8 G/KG	22627 PPM
2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL	1670 MG/KG	1400 MG/KG	>0.5 MG/L
MERCAPTAN/AMINE BLEND	N/D	N/D	N/D

'N/D' = 'NOT DETERMINED'

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## 12. ECOLOGICAL INFORMATION

ECOTOXICITY: NOT AVAILABLE.

MOBILITY AND PERSISTENCE: NOT AVAILABLE.

ENVIRONMENTAL FATE: NOT AVAILABLE.

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### **13. DISPOSAL CONSIDERATIONS**

PLEASE SEE ALSO SECTION 15, REGULATORY INFORMATION.

WASTE MANAGEMENT RECOMMENDATIONS:

IF THIS MATERIAL BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE BY RCRA CRITERIA (40CFR 261). DISPOSE OF ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

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### **14. TRANSPORT INFORMATION**

PROPER SHIPPING NAME: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

TECHNICAL NAME: MERCAPTAN POLYMER MIXTURE

HAZARD CLASS: 8

UN NUMBER: 3267

PACKING GROUP: III

EMERGENCY RESPONSE GUIDE NO.: 153

IMDG PAGE NUMBER: 8147-1

OTHER:

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### **15. REGULATORY INFORMATION**

U.S. FEDERAL REGULATIONS:

TSCA:



ALL INGREDIENTS OF THIS PRODUCT ARE LISTED, OR ARE EXEMPT FROM LISTING, ON THE TSCA INVENTORY.

THE FOLLOWING RCRA CODE(S) APPLIES TO THIS MATERIAL IF IT BECOMES WASTE:  
NONE

REGULATORY STATUS OF HAZARDOUS CHEMICAL CONSTITUENTS OF THIS PRODUCT:

CONSTITUENT	EXTREMELY HAZARDOUS*	TOXIC CHEMICAL**	CERCLA RQ (LBS)	TSCA 12B EXPORT NOTIFICATION
ISOPROPANOL	NO	YES	0.0	REQUIRED
2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL	NO	NO	0.0	NOT REQUIRED
MERCAPTAN/AMINE BLEND	NO	NO	0.0	NOT REQUIRED

\*CONSULT THE APPROPRIATE REGULATIONS FOR EMERGENCY PLANNING AND RELEASE REPORTING REQUIREMENTS FOR SUBSTANCES ON THE SARA SECTION 301 EXTREMELY HAZARDOUS SUBSTANCE LIST.

\*\*SUBSTANCES FOR WHICH THE "TOXIC CHEMICAL" COLUMN IS MARKED "YES" ARE ON THE SARA SECTION 313 LIST OF TOXIC CHEMICALS, FOR WHICH RELEASE REPORTING MAY BE REQUIRED. FOR SPECIFIC REQUIREMENTS, CONSULT THE APPROPRIATE REGULATIONS.

FOR PURPOSES OF SARA SECTION 312 HAZARDOUS MATERIALS INVENTORY REPORTING, THE FOLLOWING HAZARD CLASSES APPLY TO THIS MATERIAL:  
IMMEDIATE HEALTH HAZARD  
DELAYED HEALTH HAZARD

CANADIAN REGULATIONS:

WHMIS HAZARD CLASS(ES): D2B

ALL COMPONENTS OF THIS PRODUCT ARE ON THE DOMESTIC SUBSTANCES LIST.

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## 16. OTHER INFORMATION

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) RATINGS:

HEALTH 3\*  
FLAMMABILITY 1  
REACTIVITY 1

REVISIONS FOR THIS ISSUE:

MSDS SECTION: 3

REVISIONS: UPDATED EMERGENCY OVERVIEW

THE INFORMATION AND RECOMMENDATIONS IN THIS DOCUMENT ARE BASED ON THE BEST INFORMATION AVAILABLE TO US AT THE TIME OF PREPARATION, BUT WE MAKE NO OTHER WARRANTY, EXPRESS OR IMPLIED, AS TO ITS CORRECTNESS OR COMPLETENESS, OR AS TO THE RESULTS OF RELIANCE ON THIS DOCUMENT.

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9