

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 16505 PART A
MSDS Number: 16505-1
Version Number: H
MSDS Date: JUN-22-2005
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SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: EPOCAP 16505 PART A
Hazard Rating: Health: 2 Fire: 1 Reactivity: 0 PPI:

Company Identification: ROYAL ADHESIVES & SEALANTS LLC
600 CORTLANDT STREET
BELLEVILLE NJ 07109-3384

Contact: BRUCE WEINMAN
Telephone/Fax: (973) 751-3000 (973) 751-8407
Emergency Phone (24 Hour): ENVIRONMENTAL SPECIALIST
(973) 751-3000
Chemtrec (24 Hour): (800) 424-9300
Preparer: B. WEINMAN
ENVIRONMENTAL SPECIALIST

Product Class: EPOXY
Trade Name: EPOCAP 16505 PART A
Product Code: 16505-1

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients	CAS Number
EPOXY RESIN	25068-38-6
GROUND LIMESTONE	TRADE SECRET
ALIPHATIC GLYCIDYL ETHER	TRADE SECRET
POLYDIMETHYLSILOXANE	TRADE SECRET

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory

SECTION III - HAZARDS IDENTIFICATION

EYE CONTACT:
PRODUCT IS MODERATELY IRRITATING TO THE EYES.
SKIN CONTACT:

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PRODUCT IS MODERATELY IRRITATING TO THE SKIN. MAY CAUSE SKIN SENSITIZATION. SKIN SENSITIZATION MAY BE EVIDENCED BY RASHES, ESPECIALLY HIVES.

INHALATION:

BECAUSE OF ITS LOW VOLATILITY THIS PRODUCT IS NOT LIKELY TO BE AN INHALATION HAZARD.

INGESTION:

THIS PRODUCT IS CONSIDERED TO HAVE A LOW ORDER OF ACUTE ORAL TOXICITY.

AGGRAVATED MEDICAL CONDITIONS:

PREEXISTING SKIN AND EYE DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. PREEXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOSURE TO THIS PRODUCT.

HEALTH HAZARD INFORMATION:

OTHER HEALTH INFORMATION (EPOXY RESIN):

CHRONIC STUDIES: RECENT 2 YEAR BIOASSAYS IN MICE EXPOSED BY THE DERMAL ROUTE TO EPOXY RESIN, THE DIGLYCIDYL ETHER OF BISPHENOL A (DGEBA), OR TO RESINS PREDOMINANTLY OF DGEBA HAVE YIELDED VERY LIMITED EVIDENCE OF WEAK CARCINOGENICITY. DGEBA IS A COMPONENT OF THE RESIN IN THIS PRODUCT. THE AUTHORS OF THIS WORK CONCLUDED THAT THE RENAL TUMOR EVIDENCE WITH THIS RESIN "WAS OF NO BIOLOGICAL SIGNIFICANCE" AND THAT THE RESIN "IS NOT A SYSTEMIC CARCINOGEN WHEN APPLIED TO THE DORSAL SKIN OF CF 1 MICE." IARC CONCLUDED THAT DGEBA WAS NOT CLASSIFIABLE AS A CARCINOGEN (IARC GROUP 3) BASED ON THE FOLLOWING: HUMAN AND ANIMAL EVIDENCE BOTH INADEQUATE.

MUTAGENICITY: BOTH THE RESIN AND DGEBA, HAVE PROVED TO BE INACTIVE WHEN TESTED BY IN VIVO MUTAGENICITY ASSAYS. THEY HAVE BOTH SHOWN ACTIVITY BY THE IN VITRO MICROBIAL MUTAGENICITY SCREENING AND HAVE BOTH PRODUCED CHROMOSOMAL ABERRATIONS IN CULTURED RAT LIVER CELLS. THE SIGNIFICANCE OF THIS INFORMATION TO MAN IS UNKNOWN.

SECTION IV - FIRST AID MEASURES

EYE CONTACT:

FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET IMMEDIATE MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS FROM SKIN. FLUSH SKIN

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WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. LAUNDRER CONTAMINATED CLOTHING. DESTROY LEATHER ARTICLES INCLUDING SHOES.

INHALATION:

REMOVE PERSON TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET IMMEDIATE MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING. GET MEDICAL ADVICE.

SECTION V - FIRE-FIGHTING MEASURES

Flammability Class	IIIB
Flash Range:	Not Available Pensky-Martens Closed Cup ASTM D 93 >200
Explosive Range:	Not Available

FIRE-FIGHTING MEASURES:

USE WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE. WATER OR FOAM MAY CAUSE FROTHING. USE WATER TO COOL FIRE-EXPOSED CONTAINERS. IF A LEAK OR SPILL HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE THE VAPORS AND PROVIDE PROTECTION TO THE PEOPLE ATTEMPTING TO STOP THE LEAK. USE FULL TURNOUT GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS (SCBA). FIRE EXPOSED CONTAINERS MAY BUILD PRESSURE AND BURST.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SPILLS:

SHUT OFF ALL IGNITION SOURCES AND DIKE SPILL TO CONTAIN AND PREVENT ENTRY INTO SEWERS OR WATER SOURCES. ABSORB SPILLED MATERIAL AND PLACE IN CLOSED CONTAINER FOR DISPOSAL. CONTROLLED INCINERATION. HANDLE IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL ENVIRONMENTAL PROTECTION AGENCY REGULATIONS.

SECTION VII - HANDLING AND STORAGE

STORAGE CONDITIONS:

STORE IN A COOL, DRY PLACE. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

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SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits					
	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
EPOXY RESIN	N/est	N/est	N/est	N/est	N/est
GROUND LIMESTONE	10.0000 mg/M3	N/est	N/est	N/est	N/est
ALIPHATIC GLYCIDYL ETHER	N/est	N/est	N/est	N/est	N/est
POLYDIMETHYLSILOXANE	N/est	N/est	N/est	N/est	N/est

PERSONAL PROTECTIVE EQUIPMENT:

IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROL OR VENTILATION, WEAR A RESPIRATOR APPROVED BY NIOSH/MSHA WHENEVER EXPOSED TO FUMES OR VAPORS. COMPLY WITH OSHA 1910.134 (CFR). SELF-CONTAINED BREATHING APPARATUS IN HIGH CONCENTRATIONS. LOCAL EXHAUST IS RECOMMENDED. USE CHEMICAL RESISTANT PROTECTIVE GLOVES, CHEMICAL SPLASH GOGGLES. CHEMICAL RESISTANT PROTECTIVE CLOTHING TO MINIMIZE EXPOSURE; CHEMICAL SPLASH APRON, FULL FACE SHIELD. EYE WASH STATION AND SAFETY SHOWER SHOULD BE AVAILABLE FOR EMERGENCY USE.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Form:	LIQUID
Boiling Range:	Not Available
Vapor Pressure (mmHg):	Not Available
Melting Point:	Not Applicable
Evaporation Rate:	Unavailable
% Volatile	Not Available
Specific Gravity:	1.55

SECTION X - STABILITY AND REACTIVITY

Stability: This product is stable

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Hazardous Polymerization: Hazardous polymerization will not occur

REACTIVITY:

INCOMPATIBILITY:

OXIDIZING AGENTS, STRONG MINERAL ACIDS, STRONG LEWIS ACIDS, BASES, MERCAPTANS, AMINES.

CONDITIONS TO AVOID:

HIGH TEMPERATURES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE, CARBON DIOXIDE, ALDEHYDES, ACIDS.

SECTION XI - TOXICOLOGICAL INFORMATION

Lethal Dose Information (ppm)	Oral	Skin	Inhale	LC50
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SECTION XII - ECOLOGICAL INFORMATION

NO INFORMATION IS AVAILABLE.

SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS:

THIS PRODUCT IF DISPOSED OF IN THE PURCHASED FORM IS NOT CONSIDERED RCRA HAZARDOUS.

SECTION XIV - TRANSPORT INFORMATION

UN Number	
UN Pack Group	
UN Class	
ICAO/IATA Class	NOT REGULATED
IMDG Class	NOT REGULATED
Shipping Name	PLASTIC LIQUID, NOS
ADR/RID Class	NOT REGULATED
DOT Hazard Class	
Technical Name	

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

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ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE ON THE TSCA INVENTORY.

SECTION XVI - OTHER INFORMATION

DISCLAIMER:

ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN (HEREINAFTER "INFORMATION") ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, ROYAL ADHESIVES & SEALANTS LLC MAKES NO REPRESENTATIONS AS TO THE COMPLETENESS OR ACCURACY THEREOF. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING SAME WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR PURPOSES PRIOR TO USE. IN NO EVENT WILL ROYAL ADHESIVES & SEALANTS LLC BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF ANY NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

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SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: EPOCAP 16505 PART B
Hazard Rating: Health: 3 Fire: 2 Reactivity: 0 PPI:

Company Identification: ROYAL ADHESIVES & SEALANTS LLC
600 CORTLANDT STREET
BELLEVILLE NJ 07109-3384

Contact: BRUCE WEINMAN
Telephone/Fax: (973) 751-3000 (973) 751-8407
Emergency Phone (24 Hour): ENVIRONMENTAL SPECIALIST
(973) 751-3000
Chemtrec (24 Hour): (800) 424-9300
Preparer: B. WEINMAN
ENVIRONMENTAL SPECIALIST

Product Class: POLYAMINE MIXTURE
Trade Name: EPOCAP 16505 PART B
Product Code: 16505-2

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients: CAS Number

MODIFIED ALIPHATIC AMINE: TRADE SECRET

TRADE SECRET: TRADE SECRET

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory

SECTION III - HAZARDS IDENTIFICATION

EYE CONTACT:

PRODUCT IS EXTREMELY IRRITATING TO THE EYES AND MAY CAUSE EXTREME DAMAGE INCLUDING BLINDNESS. VAPORS MAY BE IRRITATING.

SKIN CONTACT:

PRODUCT IS SEVERELY IRRITATING TO THE SKIN AND MAY CAUSE SKIN SENSITIZATION.

INHALATION:

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VAPORS GENERATED FROM EXPOSURE IN POORLY VENTILATED AREAS OR CONFINED SPACES, ARE IRRITATING AND CAUSE NASAL DISCHARGE, COUGHING, AND DISCOMFORT IN THE NOSE AND THROAT. PROLONGED OR REPEATED OVEREXPOSURE MAY RESULT IN LUNG DAMAGE. INHALATION MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS OF MATERIAL.

INGESTION:

CAUSES BURNING OF MOUTH, THROAT, AND STOMACH WITH ABDOMINAL AND CHEST PAIN, NAUSEA, VOMITING, DIARRHEA, THIRST, WEAKNESS, AND COLLAPSE.

OTHER HEALTH HAZARD INFORMATION:

SKIN SENSITIZATION MAY BE EVIDENCED BY RASHES, ESPECIALLY HIVES.

THIS PRODUCT CONTAINS AN AMINE WHICH MAY PRODUCE TEMPORARY AND REVERSIBLE HAZY OR BLURRED VISION.

OVEREXPOSURE TO VAPOR MAY AGGRAVATE EXISTING RESPIRATORY CONDITIONS, SUCH AS ASTHMA, BRONCHITIS, AND INFLAMMATORY OR FIBROTIC RESPIRATORY DISEASE.

REPEATED SKIN EXPOSURE MAY CAUSE ALLERGIC CONTACT DERMATITIS.

SECTION IV - FIRST AID MEASURES

EYE CONTACT:

FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER EYE LIDS. GET IMMEDIATE MEDICAL ATTENTION.

SKIN CONTACT:

WIPE EXCESS FROM SKIN AND FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. LAUNDRY CLOTHING, DISCARD LEATHER CLOTHING.

INHALATION:

REMOVE PERSON TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING. ADMINISTER 3-4 GLASSES OF MILK OR WATER. GET IMMEDIATE MEDICAL ATTENTION. NOTHING BY MOUTH IF VICTIM IS DROWSY, CONVULSING, OR UNCONSCIOUS.

SECTION V - FIRE-FIGHTING MEASURES

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Flammability Class: IIB
Flash Range: Not Available
Pensky-Martens Closed Cup ASTM D 93
118F
Explosive Range: Not Available

FIRE-FIGHTING MEASURES:

USE WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE.
WATER OR FOAM MAY CAUSE FROTHING. USE WATER TO COOL FIRE-EXPOSED CONTAINERS. IF A LEAK OR SPILL HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE THE VAPORS AND PROVIDE PROTECTION TO THE PEOPLE ATTEMPTING TO STOP THE LEAK. USE FULL TURNOUT GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS (SCBA).
FIRE EXPOSED CONTAINERS MAY BUILD PRESSURE AND BURST.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SPILLS:

ABSORB LIQUID MATERIAL AND PLACE IN CONTAINER FOR DISPOSAL. COMPLY WITH LOCAL, STATE, AND FEDERAL EPA REGULATIONS.

SECTION VII - HANDLING AND STORAGE

STORAGE CONDITIONS:

STORE IN A COOL, DRY PLACE. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
MODIFIED ALIPHATIC AMINE	N/est	N/est	N/est	N/est	N/est
TRADE SECRET	N/est	N/est	N/est	N/est	N/est

PERSONAL PROTECTIVE EQUIPMENT:

IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROL OR VENTILATION, WEAR A RESPIRATOR APPROVED BY NIOSH/MSHA WHENEVER EXPOSED TO

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FUMES OR VAPORS. COMPLY WITH OSHA 1910.134 (CFR).
SELF-CONTAINED BREATHING APPARATUS IN HIGH CONCENTRATIONS.
LOCAL EXHAUST IS RECOMMENDED.
USE CHEMICAL RESISTANT PROTECTIVE GLOVES, CHEMICAL SPLASH GOGGLES.
CHEMICAL RESISTANT PROTECTIVE CLOTHING TO MINIMIZE EXPOSURE;
CHEMICAL SPLASH APRON, FULL FACE SHIELD. EYE WASH STATION AND
SAFETY SHOWER SHOULD BE AVAILABLE FOR EMERGENCY USE.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Form:	LIQUID
Appearance/Color:	BLUE
Odor:	AMINE
Boiling Range:	Not Available
Vapor Pressure (mmHg):	Not Available
Melting Point:	Not Applicable
Evaporation Rate:	Unavailable
% Volatile	Not Available
Specific Gravity:	0.97

SECTION X - STABILITY AND REACTIVITY

Stability:	This product is stable
Hazardous Polymerization:	Hazardous polymerization will not occur

REACTIVITY:

INCOMPATIBILITY:

OXIDIZING AGENTS, CLEANING SOLUTIONS SUCH AS CHROMERGE/AQUA REGIA.

CONDITIONS TO AVOID:

HIGH TEMPERATURES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES, AMMONIA.

SECTION XI - TOXICOLOGICAL INFORMATION

Lethal Dose Information (ppm)	Oral	Skin	Inhale	LC50
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TOXICOLOGICAL INFORMATION:
NO INFORMATION IS AVAILABLE.

SECTION XII - ECOLOGICAL INFORMATION

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NO INFORMATION IS AVAILABLE.

SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS:

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH FEDERAL AND LOCAL REGULATIONS. THIS PRODUCT AS SOLD IS CONSIDERED TO BE RCRA HAZARDOUS AND DOES EXHIBIT THE CHARACTERISTIC OF IGNITABILITY, D001.

SECTION XIV - TRANSPORT INFORMATION

UN Number	2920
UN Pack Group	II
UN Class	8
ICAO/IATA Class	8
IMDG Class	8
Shipping Name	CORROSIVE LIQUIDS, FLAMMABLE NOS (POLYALKYLAMINE)
ADR/RID Class	8
DOT Hazard Class	
Technical Name	

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

ALL INGREDIENTS CONTAINED IN THIS PRODUCT ARE ON THE TSCA INVENTORY.

SECTION XVI - OTHER INFORMATION

DISCLAIMER:

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