

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number: H
MSDS Date: JUN-28-2005
Page Number: 1 of 7

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: EPOCAP 19284 PART A
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: EPOXY
Trade Name: EPOCAP 19284 PART A
Product Code: 19284-1

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients	CAS Number
GROUND LIMESTONE (CONTAINS LESS THAN 1% CRYSTALLINE SILICA)	TRADE SECRET
EPOXY RESIN CONTAINING BUTYL GLYCIDYL ETHER (BGE)	MIXTURE
EPOXY RESIN	25068-38-6
CARBON BLACK	1333-86-4
POLYDIMETHYLSILOXANE	TRADE SECRET

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

SECTION III - HAZARDS IDENTIFICATION

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number H
MSDS Date: JUN-28-2005
Page Number: 2 of 7

EYE CONTACT:

PRODUCT MAY BE SEVERELY IRRITATING TO THE EYES.

SKIN CONTACT:

PRODUCT IS IRRITATING TO THE SKIN. PROLONGED OR REPEATED CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS. PRODUCT MAY CAUSE SKIN SENSITIZATION. SKIN SENSITIZATION MAY BE EVIDENCED AS RASHES, ESPECIALLY HIVES.

INHALATION:

PRODUCT MAY CAUSE IRRITATION TO THE NOSE, THROAT AND RESPIRATORY TRACT. MAY PRODUCE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION. EARLY TO MODERATE CNS DEPRESSION MAY BE EVIDENCED BY HEADACHE, NAUSEA, GIDDINESS, AND DIZZINESS; IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH MAY OCCUR.

INGESTION:

PRODUCT IS SLIGHTLY TOXIC AND MAY BE HARMFUL IF SWALLOWED.

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 AND BGE):

CHRONIC STUDIES: RECENT 2 YEAR BIOASSAYS IN MICE EXPOSED BY THE DERMAL ROUTE TO EPOXY RESIN, THE DIGLYCIDYL ETHER OF BISPHENOL A (DGBPA), OR TO RESINS PREDOMINANTLY OF DGBPA HAVE YIELDED VERY LIMITED EVIDENCE OF WEAK CARCINOGENICITY. DGBPA 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 DGBPA WAS NOT CLASSIFIABLE AS A CARCINOGEN (IARC GROUP 3) BASED ON THE FOLLOWING: HUMAN AND ANIMAL EVIDENCE BOTH INADEQUATE.

MUTAGENICITY: BOTH THE RESIN AND DGBPA, 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.

BGE HAS BEEN REPORTED TO BE MUTAGENIC IN IN-VITRO TESTS. TESTS IN

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number: H
MSDS Date: JUN-28-2005
Page Number: 3 of 7

MICE GAVE MIXED RESULTS (DOMINANT LETHAL TESTS).

HAZARDOUS FILLER WARNING FOR CARBON BLACK:

THIS FORMULA CONTAINS HAZARDOUS FILLERS WHICH ARE NOT HAZARDOUS IN A WET OR ENCAPSULATED STATE. HOWEVER, IF A FORMULA CONTAINING A HAZARDOUS FILLER IS REDUCED TO A RESPIRABLE FRACTION BY GRINDING OR PUTTING INTO AN AIRBORNE POWDER, THE POWDER IS CONSIDERED A HAZARDOUS MATERIAL. IARC CLASSIFICATION FOR CARBON BLACK POWDER IS GROUP 2B (POSSIBLY CARCINOGENIC TO HUMANS).

SECTION IV - FIRST AID MEASURES

EYE CONTACT:

FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. LAUNDRY CONTAMINATED CLOTHING. DESTROY LEATHER ARTICLES INCLUDING SHOES.

INHALATION:

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

INGESTION:

DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.

SECTION V - FIRE-FIGHTING MEASURES

Flammability Class	IIIA
Flash Range:	Not Available
	Pensky-Martens Closed Cup ASTM D 93 175F
Explosive Range:	Not Available

FIRE-FIGHTING MEASURES:

USE WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE.

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number: H
MSDS Date: JUN-28-2005
Page Number: 4 of 7

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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
GROUND LIMESTONE (CONTAINS LESS THAN 1% CRYSTALLINE SILICA)	0.0500 mg/M3	N/est	N/est	N/est	0.1000 mg/M3
EPOXY RESIN CONTAINING BUTYL GLYCIDYL ETHER (BGE)	25.0000 PPM	50.0000 PPM	N/est	N/est	25.0000 PPM
EPOXY RESIN	N/est	N/est	N/est	N/est	N/est
CARBON BLACK	3.5000 mg/M3	N/est	N/est	N/est	3.5000 mg/M3
POLYDIMETHYLSILOXANE					

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number H
MSDS Date: JUN-28-2005
Page Number: 6 of 7

TOXICOLOGICAL INFORMATION:
NO INFORMATION IS AVAILABLE.

SECTION XII - ECOLOGICAL INFORMATION

NO INFORMATION IS AVAILABLE.

SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS:

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH FEDERAL AND LOCAL REGULATIONS.

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:

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

SCHEDULE B NUMBER:

3907.30.0000 IS THE SCHEDULE B EXPORT CLASSIFICATION NUMBER.

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

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART A
MSDS Number: 19284-1
Version Number: H
MSDS Date: JUN-28-2005
Page Number: 7 of 7

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.

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART B
MSDS Number: 19284-2
Version Number: F
MSDS Date: JUN-28-2005
Page Number: 1 of 5

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: EPOCAP 19284 PART B
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: AMINE
Trade Name: EPOCAP 19284 PART B
Product Code: 19284-2

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients CAS Number

TRADE SECRET

TRADE SECRET

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

SECTION III - HAZARDS IDENTIFICATION

EYE CONTACT:

MAY CAUSE SEVERE IRRITATION WITH CORNEAL INJURY WHICH MAY RESULT IN PERMANENT IMPAIRMENT OF VISION, EVEN BLINDNESS.

SKIN:

SHORT SINGLE EXPOSURE MAY CAUSE SEVERE SKIN BURNS. MAY CAUSE ALLERGIC SKIN REACTION IN SUSCEPTIBLE INDIVIDUALS. A SINGLE SHORT EXPOSURE MAY RESULT IN THE MATERIAL BEING ABSORBED IN HARMFUL AMOUNTS.

INHALATION:

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART B
MSDS Number: 19284-2
Version Number F
MSDS Date: JUN-28-2005
Page Number: 2 of 5

EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO THE UPPER RESPIRATORY TRACT. MAY CAUSE RESPIRATORY SENSITIZATION IN SUSCEPTIBLE INDIVIDUALS.

INGESTION:

SINGLE DOSE ORAL TOXICITY IS LOW. SMALL AMOUNTS SWALLOWED NOT LIKELY TO CAUSE INJURY. SWALLOWING LARGE AMOUNTS MAY CAUSE GASTROINTESTINAL IRRITATION OR ULCERATION.

OTHER HEALTH HAZARD INFORMATION:

THIS PRODUCT DID NOT CAUSE CANCER IN LONG-TERM ANIMAL STUDIES.

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. LAUNDRER CLOTHING, DISCARD LEATHER CLOTHING.

INHALATION:

REMOVE PERSON TO FRESH AIR AND CALL A PHYSICIAN. PREVENT ASPIRATION OF VOMIT BY TURNING VICTIMS HEAD TO THE SIDE.

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

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

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART B
MSDS Number: 19284-2
Version Number: F
MSDS Date: JUN-28-2005
Page Number: 3 of 5

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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
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 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
Odor: AMINE
Boiling Range: Not Available
Vapor Pressure (mmHg): Not Available

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART B
MSDS Number: 19284-2
Version Number F
MSDS Date: JUN-28-2005
Page Number: 4 of 5

Melting Point: Not Applicable
Evaporation Rate: Unavailable
% Volatile Not Available
Specific Gravity: 1.00

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

NO INFORMATION IS AVAILABLE.

SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS:

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH FEDERAL AND LOCAL REGULATIONS.

SECTION XIV - TRANSPORT INFORMATION

UN Number 2320
UN Pack Group III
UN Class 8
ICAO/IATA Class 8

MATERIAL SAFETY DATA SHEET

MSDS Name: EPOCAP 19284 PART B
MSDS Number: 19284-2
Version Number F
MSDS Date: JUN-28-2005
Page Number: 5 of 5

IMDG Class 8
Shipping Name TETRAETHYLENEPENTAMINE
ADR/RID Class 8
DOT Hazard Class
Technical Name

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

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SECTION XVI - OTHER INFORMATION

DISCLAIMER:

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