MSDS Name: EPOWELD 7020 PART A

MSDS Number: 07020-1

Version Number F
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SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name:

EPOWELD 7020 PART A
Health: 3 Fire: 2 Reactivity: 0 PPI: Hazard Rating:

Company Identification: ROYAL ADHESIVES & SEALANTS LLC 600 CORTLANDT STREET

BELLEVILLE NJ 07109-3384

Contact: BRUCE WEINMAN Telephone/Fax: (973) 751-3000 (973) 751-3000 (973) 751-8407

Emergency Phone (24 Hour): ENVIRONMENTAL SPECIALIST

(973) 751-3000 Chemtrec (24 Hour): (800) 424-9300 Preparer B. WEINMAN

Preparer

ENVIRONMENTAL SPECIALIST

Product Class

EPOXY
EPOWELD 7020 PART A Trade Name

Product Code 07020-1

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients CAS Number

EPOXY RESIN 25068-38-6

BUTYL GLYCIDYL ETHER (BGE) 2426-08-6

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 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

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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 (DGEBPA), OR TO RESINS PREDOMINANTLY OF DGEBPA HAVE YIELDED VERY LIMITED EVIDENCE OF WEAK CARCINOGENICITY. DGEBPA 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 DGEBPA WAS NOT CLASSIFIABLE AS A CARCINOGEN (IARC GROUP 3) BASED ON THE FOLLOWING: HUMAN AND ANIMAL EVIDENCE BOTH INADEQUATE.

MUTAGENICITY: BOTH THE RESIN AND DGEBPA, 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 MICE GAVE MIXED RESULTS (DOMINANT LETHAL TESTS).

SECTION IV - FIRST AID MEASURES

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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. LAUNDER 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

157F

Not Available Explosive Range:

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.

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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

EPOXY RESIN

N/est N/est N/est N/est N/est

BUTYL GLYCIDYL ETHER (BGE)

25.0000 PPM 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 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:
Vapor Pressure (mmHg):
Melting Point:
Evaporation Rate:

Higold
Not Available
Not Available
Unavailable

Not Available % Volatile

Specific Gravity: 1.14

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SECTION X - STABILITY AND REACTIVITY

Stability: This product is stable
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

Oral Skin Inhale LC50 Lethal Dose Information (ppm)

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

IMDG Class

NOT REGULATED

NOT REGULATED

NOT REGULATED

Shipping Name

PLASTIC LIQUID, NOS

ADR/RID Class

NOT REGULATED

DOT Hazard Class Technical Name

SECTION XV - REGULATORY INFORMATION

MSDS Name: EPOWELD 7020 PART A

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MSDS Date: JUL-01-2005

Page Number: 6 of 6

TSCA STATUS:

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

INVENTORY STATUS:

THE COMPONENT(S) OF THIS PRODUCT HAVE BEEN VERIFIED TO BE LISTED ON THE FOLLOWING INVENTORIES:

UNITED STATES
CANADA (DSL)
EUROPE (EU)
AUSTRALIA
JAPAN
CHINA
KOREA
PHILIPPINES

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.

MSDS Name: EPOWELD 3655 PART B

MSDS Number: 03655-2

Version Number H
MSDS Date: JUL-12-2005
Page Number: 1 of 6

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name:

EPOWELD 3655 PART B
Health: 3 Fire: 1 Reactivity: 0 PPI: Hazard Rating:

Company Identification: ROYAL ADHESIVES & SEALANTS LLC

600 CORTLANDT STREET BELLEVILLE NJ 07109-3384

Contact: BRUCE WEINMAN Telephone/Fax: (973) 751-3000 (973) 751-3000 (973) 751-8407

Emergency Phone (24 Hour): ENVIRONMENTAL SPECIALIST

(973) 751-3000 Chemtrec (24 Hour): (800) 424-9300 Preparer B. WEINMAN

Preparer

ENVIRONMENTAL SPECIALIST

Product Class

POLYAMIDE
EPOWELD 3655 PART B Trade Name

Product Code 03655-2

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients CAS Number

POLYAMIDE TRADE SECRET

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

SECTION III - HAZARDS IDENTIFICATION

EYE CONTACT:

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

SKIN CONTACT:

PRODUCT MAY BE IRRITATING TO THE SKIN. PRODUCT MAY CAUSE SKIN SENSITIZATION.

INHALATION:

SEVERE RESPIRATORY TRACT IRRITANT. MAY CAUSE RESPIRATORY EFFECTS SUCH AS COUGH, TIGHTNESS OF CHEST OR SHORTNESS OF BREATH.

MSDS Name: EPOWELD 3655 PART B

MSDS Number: 03655-2 Version Number H

MSDS Date: MSDS Date: JUL-12-2005 Page Number: 2 of 6

INGESTION:

MAY CAUSE IRRITATION OF MOUTH AND THROAT AND THE GASTROINTESTINAL TRACT.

OTHER HEALTH HAZARD INFORMATION:

PREEXISTING EYE, SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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. LAUNDER 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

Flammability Class IIIB

Flash Range: Not Available

Pensky-Martens Closed Cup ASTM D 93

>300F

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.

MSDS Name: EPOWELD 3655 PART B

MSDS Number: 03655-2 Version Number H

MSDS Date: JUL-12-2005 Page Number: 3 of 6

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

POLYAMIDE

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

LIQUID Form: Appearance/Color: AMBER Odor: AMINE

Boiling Range: Not Available Vapor Pressure (mmHg): Not Available

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Merting 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

Oral Skin Inhale LC50 Lethal Dose Information (ppm)

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
IMDG Class
NOT REGULATED
NOT REGULATED
Shipping Name
PLASTIC LIQUID, NOS

MSDS Name: EPOWELD 3655 PART B

MSDS Number: 03655-2 Version Number H

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ADR/RID Class NOT REGULATED

DOT Hazard Class Technical Name

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

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INVENTORY STATUS:

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UNITED STATES CANADA (DSL) EUROPE (EU) AUSTRALIA JAPAN CHINA KOREA

PHILIPPINES

SECTION XVI - OTHER INFORMATION

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