

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#1
Version Number: F
MSDS Date: AUG-07-2003
Page Number: 1 of 6

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: DOUBLE BUBBLE GREEN PACKAGE
Hazard Rating: Health: 2 Fire: 1 Reactivity: 0 PPI:

Company Identification: ELEMENTIS SPECIALTIES
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: TRANSPARENT, WATER CLEAR
Product Code: (04004) PART A

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:

PRODUCT IS MODERATELY IRRITATING TO THE EYES.

SKIN CONTACT:

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.

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE

MSDS Number: 03672#1

Version Number F

MSDS Date: AUG-07-2003

Page Number: 2 of 6

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 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. GET IMMEDIATE MEDICAL ATTENTION.

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#1
Version Number F
MSDS Date: AUG-07-2003
Page Number: 3 of 6

INGESTION:
DO NOT INDUCE VOMITING. GET MEDICAL ADVICE.

SECTION V - FIRE-FIGHTING MEASURES

Flammability Class IIIIB
Flash Range: Not Available
Pensky-Martens Closed Cup ASTM D 93
470F
Explosive Range: Not Available

FIRE-FIGHTING MEASURES:

WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE.
DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR
(HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER
BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-
CONTAINED BREATHING APPARATUS (SCBA).
COOL FIRE EXPOSED CONTAINERS WITH WATER.

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
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

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#1
Version Number F
MSDS Date: AUG-07-2003
Page Number: 4 of 6

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: CLEAR
Boiling Range: Not Available
Vapor Pressure (mmHg): Not Available
Melting Point: Not Applicable
Evaporation Rate: Unavailable

% Volatile Not Available
Specific Gravity: 1.16

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

Lethal Dose Information (ppm)	Oral	Skin	Inhale	LC50
-------------------------------	------	------	--------	------

TOXICOLOGICAL INFORMATION:
NO INFORMATION IS AVAILABLE.

SECTION XII - ECOLOGICAL INFORMATION

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#1
Version Number F
MSDS Date: AUG-07-2003
Page Number: 5 of 6

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:

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

INVENTORY STATUS:

ALL THE COMPONENT(S) OF THIS PRODUCT HAVE BEEN FOUND ON THE FOLLOWING INVENTORIES:

UNITED STATES

ALL THE COMPONENT(S) OF THIS PRODUCT HAVE NOT YET BEEN IDENTIFIED ON THE FOLLOWING INVENTORIES:

EUROPE
CANADA
AUSTRALIA
JAPAN
KOREA
CHINA
PHILIPPINES

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#1
Version Number F
MSDS Date: AUG-07-2003
Page Number: 6 of 6

SCHEDULE B NUMBER:

3506.91.0000 IS THE SCHEDULE B EXPORT CLASSIFICATION NUMBER.

PROPOSITION 65 INFORMATION:

04004 PART A CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER/REPRODUCTIVE TOXICITY.

106-89-8	EPICHLOROHYDRIN	<1 PPM
122-60-1	PHENYL GLYCIDYL ETHER	<6 PPM

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, ELEMENTIS PERFORMANCE POLYMERS 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 ELEMENTIS PERFORMANCE POLYMERS 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: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#2
Version Number: G
MSDS Date: AUG-07-2003
Page Number: 1 of 6

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: DOUBLE BUBBLE GREEN PACKAGE
Hazard Rating: Health: 2 Fire: 1 Reactivity: 0 PPI:

Company Identification: ELEMENTIS SPECIALTIES
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: TRANSPARENT, WATER CLEAR
Product Code: (04004) PART B

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients	CAS Number
HETROCYCLIC 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 IRRITATING TO THE EYES AND MAY CAUSE BURNS TO THE EYES.
SKIN CONTACT:
IRRITATING TO THE SKIN (SPI CLASS 2). PROLONGED OR REPEATED SKIN CONTACT MAY RESULT IN THE ABSORPTION OF HARMFUL AMOUNTS OF MATERIAL. PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN BURNS.
INHALATION:

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE

MSDS Number: 03672#2

Version Number G

MSDS Date: AUG-07-2003

Page Number: 2 of 6

NO INHALATION EFFECTS ARE CURRENTLY KNOWN.

INGESTION:

MODERATELY TOXIC BY SWALLOWING. MAY CAUSE IRRITATION OF MOUTH AND THROAT, ALONG WITH ABDOMINAL PAIN, NAUSEA, VOMITING, DIARRHEA AND COLLAPSE.

OTHER HEALTH HAZARD INFORMATION:

MAY CAUSE SKIN SENSITIZATION AND DERMATITIS. ANIMAL TESTS INDICATED NEUROTOXICITY.

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 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

250F

Explosive Range:

Not Available

FIRE-FIGHTING MEASURES:

WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE.

DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS (SCBA).

COOL FIRE EXPOSED CONTAINERS WITH WATER.

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#2
Version Number: G
MSDS Date: AUG-07-2003
Page Number: 3 of 6

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
HETROCYCLIC 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 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: CLEAR
Boiling Range: Not Available
Vapor Pressure (mmHg): Not Available
Melting Point: Not Applicable
Evaporation Rate: Unavailable

% Volatile: Not Available

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#2
Version Number G
MSDS Date: AUG-07-2003
Page Number: 4 of 6

Specific Gravity: 1.11

SECTION X - STABILITY AND REACTIVITY

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

REACTIVITY:

INCOMPATIBILITY:

OXIDIZING AGENTS, STRONG MINERAL ACIDS AND WATER.

CONDITIONS TO AVOID:

HIGH TEMPERATURES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE, CARBON DIOXIDE, PHENOL, PHOSPHOROUS ACID.

SECTION XI - TOXICOLOGICAL INFORMATION

Lethal Dose Information (ppm)	Oral	Skin	Inhale	LC50
-------------------------------	------	------	--------	------

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	

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE
MSDS Number: 03672#2
Version Number: G
MSDS Date: AUG-07-2003
Page Number: 5 of 6

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

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

INVENTORY STATUS:

ALL THE COMPONENT(S) OF THIS PRODUCT HAVE BEEN FOUND ON THE FOLLOWING INVENTORIES:

UNITED STATES

ALL THE COMPONENT(S) OF THIS PRODUCT HAVE NOT YET BEEN IDENTIFIED ON THE FOLLOWING INVENTORIES:

EUROPE
CANADA
AUSTRALIA
JAPAN
KOREA
CHINA
PHILIPPINES

SCHEDULE B NUMBER:

3506.91.0000 IS THE SCHEDULE B EXPORT CLASSIFICATION NUMBER.

PROPOSITION 65 INFORMATION:

04004 PART B DOES NOT CONTAIN ANY CHEMICAL, KNOWN BY THE STATE OF CALIFORNIA, TO CAUSE CANCER/REPRODUCTIVE TOXICITY.

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, ELEMENTIS PERFORMANCE POLYMERS 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 ELEMENTIS PERFORMANCE POLYMERS BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING

MATERIAL SAFETY DATA SHEET

MSDS Name: DOUBLE BUBBLE GREEN PACKAGE

MSDS Number: 03672#2

Version Number G

MSDS Date: AUG-07-2003

Page Number: 6 of 6

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 HERE- UNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.