

MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

FOR CHEMICAL EMERGENCY Call ChemTrec day/night: 1-800-424-9300

PRODUCT AND COMPANY IDENTIFICATION

 PRODUCT NAME:
 DOUBLE/BUBBLE® MACHINEABLE
 DATE PREPARED: February 10, 2010

 EPOXY (PARTS A & B)
 CHROMATE INDUSTRIAL CORPORATION

 PART NUMBER:
 74498
 5250-A Naiman Parkway, Solon, OH 44139 • (888) 567-2206

 PART A
 PART B

 PRODUCT TYPE:
 EPOXY

PRODUCT TYPE: EPOXY HAZARD RATING: HEALTH: 2 FIRE: 1 REACTIVITY: 0 PPI: N/L PRODUCT TYPE: AMINE HAZARD RATING: HEALTH: 3 FIRE: 1 REACTIVITY: 0 PPI: N/L

PART A — SECTION 2 — INGREDIENT / HAZARD INFORMATION

HAZARDOUS INGREDIENTS	CAS NUMBER
EPOXY RESIN	25068-38-6
TALC	TRADE SECRET
ALUMINUM POWDER	7429-90-5
TRADE SECRET	TRADE SECRET
FUMED SILICA	TRADE SECRET
TRADE SECRET	TRADE SECRET

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

SECTION 3 — HAZARDS IDENTIFICATION

EYE CONTACT: SKIN CONTACT:	Product is moderately irritating to the eyes. Product is moderately irritating to the skin. May cause skin sensitization. Skin sensitization may be evidenced by
	rashes, especially lives.
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: Pre-existing skin and eye disorders may be aggravated by exposure to this product. Pre-existing skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

HEALTH HAZARD INFORMATION

HAZARDOUS FILLER WARNING FOR ALUMINUM AND TALC: This product contains aluminum and talc which are not hazardous in a wet or encapsulated state. However, if a formula containing hazardous filler is reduced to a respirable fraction by grinding or putting into an airborne powder, the powder is considered hazardous material.

SECTION 4 — 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. Launder contaminated clothing. Destroy leather articles including shoes.

 INHALATION:
 Remove person to fresh air and provide oxygen if breathing is difficult. GET MEDICAL ATTENTION.

 INGESTION:
 DO NOT INDUCE VOMITING. GET MEDICAL ADVICE.

SECTION 5 — FIRE-FIGHTING MEASURES

FLAMMABILITY CLASS: IIIB

FLASH RANGE: N/A

PENSKY-MARTENS CLOSED CUP ASTM D 93

>200°F

EXPLOSIVE RANGE: N/A

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 6 — ACCIDENTAL RELEASE MEASURES

SPILLS: Absorb liquid material and place in container for disposal. Comply with local, state and federal EPA Regulations.

SECTION 7 - HANDLING AND STORAGE

STORAGE CONDITIONS: Store in a cool, dry place. Keep away from open flames and high temperatures.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
EPOXY RESIN	N/E	N/E	N/E	N/E	N/E
TALC	2.0000 mg/m ³	N/E	N/E	N/E	N/E
ALUMINUM POWDER	10.0000 mg/m ³	N/E	N/E	N/E	15.0000 mg/m ³
TRADE SECRET	N/E	N/E	N/E	N/E	N/E
FUMED SILICA	10.0000 mg/m ³	N/E	N/E	N/E	N/E
TRADE SECRET	N/E	N/E	N/E	N/E	N/E

PERSONAL PROTECTIVE EQUIPMENT: Use with adequate ventilation. Normal use of this product does not require a respirator. Wear a respirator approved by NIOSH/MSHA whenever exposed to fumes or vapors. Comply with OSHA 1910.134 (CFR). Local exhaust is recommended. Use chemical resistant protective gloves (nitrile) to protect the skin. Use safety glasses or safety goggles to protect the eyes. Eye wash station and safety shower should be available for emergency use.

EXPOSURE LIMITS (PARTICULATES):

The EXPOSURE LIMIT chart (SECTION 8) will contain the ACGIH LIMIT for TOTAL PARTICULATES, not otherwise classified of 10 mg/m³, unless a specific limit has been established.

SECTION 9 - PHYSICAL / CHEMICAL PROPERTIES

FORM: Liquid **ODOR:** Mild VAPOR PRESSURE (mmHg): N/A EVAPORATION RATE: N/A SPECIFIC GRAVITY: 1.47

APPEARANCE/COLOR: Gray BOILING RANGE: N/A MELTING POINT: N/A % VOLATILE: N/A

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable. 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 11 –	TOXICOLO	GICAL INFORM	IATION		
LETHAL DOSE INFORMATION (PPM)	ORAL	SKIN	INHALE	LC ₅₀	
TOXICOLOGICAL INFORMATION CARCINOGENICITY (EPOXY RESIN COMPONENT):	DIGLYCIDYL carcinogenici equivocal res suggestive, b	ETHER OF BISPHE ty to the skin or any sults from a 2-year m out not conclusive, fo	nd mice exposed by t ENOL A (BADGE) yiel other organs. This stu ouse skin-painting stu r weak carcinogenicity n all BPA/ECH-based	ded no evidence of dy clarifies prior dy, which were / activity.	f

The International Agency for Research on Cancer (IARC) concluded that DIGLYCIDYL ETHER OF BISPHENOL A is not classifiable as a carcinogen (IARC GROUP 3), that is human and animal evidence of carcinogenicity is inadequate.

MUTAGENICITY: Resins of this type, liquid resins based on DIGLYCIDYL ETHER OF BISPHENOL A, have proven to be inactive when tested by in vivo mutagenicity assays. These resins have shown activity in in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

No information is available.

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS: Place in an appropriate disposal facility in compliance with federal and local regulations.

SECTION 14 – TRANSPORT INFORMATION

UN NUMBER: N/A UN CLASS: N/A IMDG CLASS: N/R ADR/RID CLASS: N/R TECHNICAL NAME: N/L

UN PACK GROUP: N/A ICAO/IATA CLASS: N/R SHIPPING NAME: PLASTIC LIQUID, NOS DOT HAZARD CLASS: N/L

PRODUCT PACKING CONFORMS TO 49 CFR 173.4 REQUIREMENTS FOR "SMALL QUANTITY EXCEPTIONS".

	SECTION 15 – REG	JLATORY INFORMATIC	N		
SARA TITLE III SECTION 31		This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:			
	CHEMICAL NAME	CAS NUMBER	%		
	ALUMINUM POWDER	7429-90-5	10 - 15		
TSCA STATUS: All ingred	ients contained in this product are on th	ne TSCA Inventory.			
INVENTORY STATUS:	All component(s) of this product have	been verified to be listed on th	e following inventories:		
	UNITED STATES (TSCA)	CANADA (DSL)			
	EUROPE (EU)	AUSTRALIA (AICS)			
	JAPAN	KOREA			
	CHINA	PHILIPPINES (PICCS)			

SECTION 16 – OTHER INFORMATION

DISCLAIMER:

Although the information and recommendations set forth herein (hereinafter known as, "Information") are presented in good faith and believed to be correct, as of the date hereof, Chromate Industrial Corporation (hereinafter known as, "CIC") 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 CIC 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, or merchantability, fitness for a particular purpose of any nature are made hereunder with respect to information or the product to which information refers.

N/A — NOT APPLICABLE N/L — NOT LISTED

PART B — SECTION 2 — INGREDIENT / HAZARD INFORMATION

HAZARDOUS INGREDIENTS	CAS NUMBER
TRADE SECRET	TRADE SECRET
4,4 ISOPROPYLIDENEDIPHENOL	80-05-7
TRADE SECRET	TRADE SECRET
TRADE SECRET	TRADE SECRET
DIETHYLENETRIAMINE	111-40-0

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

SECTION 3 — HAZARDS IDENTIFICATION

EYE CONTACT:	Product is irritating to the eyes.
SKIN CONTACT:	Expected to be harmful.
INHALATION:	Not expected to be a route of exposure due to low volatility at room temperature.
INGESTION:	Expected to be harmful.

OTHER HEALTH HAZARD INFORMATION:

A two-year feeding study in rats showed the AROMATIC DIAMINE caused effects in the pancreas, liver, thyroid and eyes. An increase in the number of tumors in the liver and thyroid of male rats and in the liver, and possibly mammary gland, of female rats was found. In rare instances, sensitization to the AROMATIC DIAMINE has been reported to occur in humans.

SECTION 4 — 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:	Flush with water for at least 15 minutes. Get medical attention if skin becomes irritated.
INHALATION:	Remove person to fresh air and call a physician. Prevent aspiration of vomit by turning victim's 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 5 — FIRE-FIGHTING MEASURES

FLAMMABILITY C	LASS: IIIB	
FLASH RANGE:	N/A	
	Pensky-Martens Clo	osed Cup ASTM D 93
	>200°F	
EXPLOSIVE RANG	SE: N/A	
FIRE-FIGHTING M	EASURES:	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 6 — ACCIDENTAL RELEASE MEASURES

SPILLS: Absorb liquid material and place in container for disposal. Comply with local, state and federal EPA Regulations.

SECTION 7 – HANDLING AND STORAGE

STORAGE CONDITIONS: Store in a cool, dry place. Keep away from open flames and high temperatures.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS	
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	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
TRADE SECRET	N/E	N/E	N/E	N/E	N/E
4,4 ISOPROPYLIDENEDIPHENOL	N/E	N/E	N/E	N/E	N/E
TRADE SECRET	N/E	N/E	N/E	N/E	N/E
TRADE SECRET	N/E	N/E	N/E	N/E	N/E
DIETHYLENETRIAMINE	1.0000 ppm	N/E	N/E	N/E	1.0000 ppm

PERSONAL PROTECTIVE EQUIPMENT: Use with adequate ventilation. Normal use of this product does not require a respirator. Wear a respirator approved by NIOSH/MSHA whenever exposed to fumes or vapors. Comply with OSHA 1910.134 (CFR). Local exhaust is recommended. Use chemical resistant protective gloves (nitrile) to protect the skin. Use safety glasses or safety goggles to protect the eyes. Eye wash station and safety shower should be available for emergency use.

EXPOSURE LIMITS (PARTICULATES):

The EXPOSURE LIMIT chart (SECTION 8) will contain the ACGIH LIMIT for TOTAL PARTICULATES, not otherwise classified of 10 mg/m³, unless a specific limit has been established.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

FORM: Liquid ODOR: Amine VAPOR PRESSURE (mmHg): N/A EVAPORATION RATE: N/A SPECIFIC GRAVITY: 1.09 APPEARANCE/COLOR: Amber BOILING RANGE: N/A MELTING POINT: N/A % VOLATILE: N/A

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

REACTIVITY

L

INCOMPATIBILITY: Oxidizing agents, mineral and organic acids, water.

CONDITIONS TO AVOID: High temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, traces of Phenol.

SECTION 11 – TOXICOLOGICAL INFORMATION					
LETHAL DOSE INFORMATION (PPM) TOXICOLOGICAL INFORMATION:	ORAL No information is available	SKIN	INHALE	LC ₅₀	
	SECTION 12 - ECOLOG		ATION		

ECOLOGICAL INFORMATION:

No information is available

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA CONSIDERATIONS: Place in an appropriate disposal facility in compliance with federal and local regulations.

SECTION 14 – TRANSPORT INFORMATION

UN NUMBER: 1760 UN CLASS: 8 IMDG CLASS: 8 ADR/RID CLASS: 8 TECHNICAL NAME: N/L UN PACK GROUP: III ICAO/IATA CLASS: 8 SHIPPING NAME: CORROSIVE LIQUID, NOS (Polyalkylamines) DOT HAZARD CLASS: N/L

PRODUCT PACKING CONFORMS TO 49 CFR 173.4 REQUIREMENTS FOR "SMALL QUANTITY EXCEPTIONS".

SECTION 15 - REGULATORY INFORMATION SARA TITLE III SECTION 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372: CHEMICAL NAME CAS NUMBER % 4,4-ISOPROPYLIDENEDIPHENOL 80-05-7 15 - 40 **TSCA STATUS:** All ingredients contained in this product are on the TSCA Inventory. **INVENTORY STATUS:** All component(s) of this product have been verified to be listed on the following inventories: UNITED STATES CANADA (DSL) EUROPE (EU) AUSTRALIA (AICS) JAPAN KOREA CHINA PHILIPPINES (PICCS)

SECTION 16 – OTHER INFORMATION

DISCLAIMER:

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