M A T E R I A L S A F E T Y D A T A S H E E T

MANUFACTURERS NAME & ADDRESS

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SECTION I PRODUCT IDENTIFICATION

PRODUCT TRADE NAME - ANC Fire Retardant Coating 032803-G (Resin)

CHEMICAL FAMILY - EPOXY RESIN

FORMULA - PROPRIETARY/TRADE SECRET

SECTION II COMPOSITION (INGREDIENTS)

MATERIAL/COMPONENT	%	TLV(ACGIH)8hr TWA	PEL(OSHA)8hr TWA
Epoxy Resin	>3	NONE ESTABLISHED	NONE ESTABLISHED
Proprietary Flame Retardant Fillers	>3	* 5mg/m^3	*5mg/m^3

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT .1% OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0% OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0% OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE.

*Note: US OSHA PEL for respirable dust (PNOR) is 5mg/m^3. These Values are applicable in dust form only.

HMIS CODES

HEALTH___2___ FLAMMABILITY___1___ REACTIVITY___0___

This product is an epoxy resin produced by the condensation reaction of Epichlorohydrin and Bisphenol-A. These raw materials are consumed in the process. Residual levels of Epichlorohydrin are controlled to 1 ppm. ma. in the product.

SECTION II-B ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	11.4 G/KG (RAT)	>20ML/KG (RABBIT)	NO DEATHS IN SAT'D
P	15.6 G/KG (MOUSE)		AIR, 8 HR.*

* This inhalation test may not be relevant due to low volatility of the resin.

SECTION III PHYSICAL DATA

BOILING POINT (ºF): >500 **APPEARANCE AND ODOR:** LIQUID FORM, MILD ODOR.

VAPOR PRESSURE: .03(MM HG) **SOLUBILITY IN H2O:** NEGLIGIBLE

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (ºF.): 480 (PMCC)

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical, or CO2.

SPECIAL FIRE FIGHTING PROCEDURES: Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots). Fire fighters should wear full emergency equipment, including self-contained breathing apparatus. Use cold spray to cool down fire & heat exposed containers to keep them from rupturing.

UNUSUAL FIRE AND EXPLOSION HAZARDS / SPECIAL PRECAUTIONS: Store in a cool, dry keep away form open flames and high temperatures. Containers, even those that have been emptied, can contain hazardous product residues. Handle in accordance with the hazard potential of curing agent(s) used. CAUTION: May cause irritation avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Contaminated leather articles, including shoes, can not be decontaminated and should be destroyed to prevent use. Heating resin above 300 deg.F in the presence of air may cause slow oxidative decomposition. Above 500 deg. F. Polymerization may occur. Some curing agents, E.G. Aliphatic polyamines can produce exothermic reactions, which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity. Do not breathe fumes. Use an NIOSH-APPROVED respirator as required to prevent overexposure. In accord with 20 CFR1910.134, use either an atmosphere supply respirator or an air-purifying respirator for organic vapors. If this resin is handled, shipped, or stored in bulk, the recommended pumping temperature is 180 deg. F Max. To prevent thermal burns, avoid skin and eye contact with hot liquid.

SECTION V HEALTH HAZARD DATA

The health effects noted below are consistent with requirements under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SKIN CONTACT: Based on similar product testing product is moderately

irritating to the skin. Based on similar product testing product may cause skin sensitization. Contact with product at elevated temperatures can result in thermal burns.

EYES: Based on similar product testing product is moderately irritating to the eyes. Contact with product at elevated temperatures can result in thermal burns.

SECTION V HEALTH HAZARD DATA CONTINUED

INHALATION: Because of its low volatility this product is not likely to be an inhalation hazard.

INGESTION: Based on product testing product is considered to have a low order of acute oral toxicity.

SIGNS & SYMPTOMS: Irritation as noted above. Skin sensitizer (allergy) may be evidence by rashes, especially hives.

AGGRAVATED MEDICAL CONDITIONS: Preexisting eye, skin, and respiratory 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.

SUPPLEMENTAL HEALTH INFORMATION: Chronic Studies: Recent 2-year Bioassays in mice exposed by the dermal route to the Diglycidyl Ether of Bisphenol-A Resin (DGEBPA), or two other commercial resins which are composed predominantly of Diglycidyl Ether of Bisphenol-A have yielded very little evidence of weak carcinogenicity. DGEBPA is a component of this resin. 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 systematic carcinogen when applied to the dorsal skin of CF1 mice." Based upon this and all other available information. The internal agency for research on cancer (IARC) concluded (1988) that DGEBPA was not classified as a carcinogen (IARC Group 3) based on the following: Human evidence--Inadequate: Animal evidence--Inadequate.

Mutagenicity: DGEBPA (a component of this product) have proved to be inactive when tested by in vivo mutagenicity assays. It has shown activity by 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.

EMERGENCY AND FIRST AID PROCEDURES:

SKIN CONTACT: Remove contaminated clothing/shoes and wipe excess from skin & wash with plenty of soap and water. Get prompt medical attention if irritation occurs. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes can not be decontaminated and should be destroyed to prevent reuse. If contact with hot product occurs immediately flush with cool water for fifteen minutes. Carefully remove clothing; if clothing is stuck to a burn area do not pull it off, but cut around it. Cover burn area with a clean material. Get medical attention immediately.

EYES: Irrigate the eye immediately with water for at least 15 mins. while holding eyelids open. Get medical attention. If contact with hot product occurs immediately flush with cool water for 15 mins. Get medical attention immediately.

INHALATION: Remove to fresh air, give oxygen if breathing is difficult. Get medical attention.

INGESTION: Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical advice. *

EMERGENCY AND FIRST AID PROCEDURES CONTINUED:

NOTE TO PHYSICIAN: * In general emisis induction unnecessary in high viscosity. Low volatility products, E.G., Neat Epoxy Resins.

SECTION VI REACTIVITY DATA

STABILITY: Stable__X__ Unstable____

CONDITIONS OR MATERIALS TO AVOID: Can react vigorously with strong oxidation agents, strong lewis or mineral acids, and strong mineral, organic bases/especially primary and secondary aliphatic amines. Reactions with some curing agents may produce considerable heat. Runaway chain reactions may char and decompose the resin system, generating unidentified fumes and vapors that may be toxic.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Carbon monoxide, aldehydes, acids, and other organic substances may be formed during combustion or elevated (>500 DEG. F.) temperature degradation.

HAZARDOUS POLYMERIZATION:

___ May occur with epoxy resins in uncontrolled conditions.
_x_ May occur with catalyst or hardeners in uncontrolled conditions
___ Will not occur

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: May burn although not readily ignitable. Use cautious judgment when cleaning up large spills, *** LARGE SPILLS *** wear respirator and protective clothing as appropriate. Shut off source of leak if safe to do so. Dike and contain. Remove with vacuum pumps or truck to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material; dispose of properly, flush area with water to remove trace residue. *** SMALL SPILLS *** Take up with an absorbent material and dispose of properly.

WASTE DISPOSAL METHOD: Incinerate or bury in an approved chemical disposal facility in a manner which complies with all local, state and federal regulations.

SECTION VIII SHIPPING DATA

D.O.T. SHIPPING NAME.....: NOT A REGULATED MATERIAL
TECHNICAL SHIPPING NAME.....: NONE ESTABLISHED

D.O.T. HAZARD CLASS.....: NONE ESTABLISHED
UN/NA NUMBER.....: NONE ESTABLISHED

SECTION IX SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Not ordinarily required.

VENTILATION: Local exhaust recommended.

PROTECTIVE GLOVES: Chemically resistant rubber type gloves recommended.

EYE PROTECTION: Chemical glasses or goggles with side shields recommended.

SECTION IX SPECIAL PROTECTION INFORMATION CONTINUED

OTHER PROTECTIVE EQUIPMENT: Wear chemical resistant clothing to minimize contact. Eye wash fountains and Safety showers should be available for emergency use.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Practice and observe good housekeeping procedures in personal hygiene and cleanliness. Avoid skin and eye contact, as well as, breathing of vapors or fumes especially when material is heated.

ENVIRONMENTAL RELEASE INFORMATION: Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if any exposure to the general public or environmental occurs or is likely to occur.
If this product becomes a waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local regulations.

SECTION X OTHER REGULATORY CONTROLS

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Protection of stratospheric ozone (pursuant to section 611 of the clean air act amendments of 1990); per 40 CFR part 82. The base resin does not contain nor was it directly manufactured with any class 1 or class 2 ozone depleting substances.

SECTION XII MSDS Revision

Revision Date: June 2003

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