

*** MATERIAL SAFETY DATA SHEET ***

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER..... 83-4770
 PRODUCT NAME..... ABLEBOND 8006
 SYNONYM NAME(S)..... Modified Epoxy Resin

Ablestik Laboratories
 Subsidiary of National Starch and Chemical Company
 20021 Susana Road
 Rancho Dominguez, CA 90221
 USA

Emergency Telephone:
 1-800-424-9300 (24 hours, CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY..... Epoxy Resin

<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION RANGES (%)</u>
Epoxy Resin	Proprietary	30-60
Ethyleneglycol monobutyl ether acetate	112-15-2	20-35
Aryl amine	Proprietary	5-10

3. HAZARDS IDENTIFICATION

EYE IRRITANT. HARMFUL IF SWALLOWED. Sensitizer.

EYE..... Irritating, and will injure eye tissue if not removed promptly.

SKIN CONTACT..... May be absorbed through the skin. May cause skin sensitization, a partial or whole-body dermatitic rash experienced after exposure, however minimal.

INHALATION..... Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Avoid breathing vapors or mists. If cured material is sanded resulting powder would be considered hazardous.

INGESTION..... Ingestion effects have not been evaluated but are assumed to cause nausea and vomiting.

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4. FIRST-AID MEASURES

EYE.....	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower lids. Get prompt medical attention.
SKIN CONTACT.....	Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. If irritation persists, get medical attention.
INHALATION.....	Remove to fresh air. Get medical attention if irritation persists.
INGESTION.....	Treat symptomatically and supportively. Get medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

5. FIREFIGHTING MEASURES

AUTOIGNITION.....	Not available
FLASH POINT.....	Not Applicable
EXTINGUISHING MEDIA.....	CO2; Foam; Dry chemical
SPECIAL FIREFIGHTING PROCEDURES....	Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes
FIRE & EXPLOSION HAZARDS.....	Emits toxic fumes under fire conditions.
UPPER EXPLOSION LIMIT (%).....	Not Applicable
LOWER EXPLOSION LIMIT (%).....	Not Applicable

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES.....	Scrape up and place in suitably labeled container for disposal.
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For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE.....	- 40 DEGREE F
SPECIAL SENSITIVITY.....	Keep away from heat.

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HANDLING/STORAGE..... While this product is supplied in wet form, processes involving sanding or grinding after curing could release airborne toxic dust. Product can ONLY be used for thin bond line applications or rapid exothermic curing reaction may result.

VENTILATION REQUIREMENTS..... Vent curing oven to outdoors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION REQUIREMENTS..... Vent curing oven to outdoors.

EYE PROTECTION REQUIREMENTS..... Wear safety glasses with side shields.

GLOVE REQUIREMENTS..... Employee must wear appropriate protective gloves to prevent contact with this substance.

CLOTHING REQUIREMENTS..... Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.

CHANGE/REMOVAL OF CLOTHING..... Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS..... Wash before eating, drinking, or using toilet facilities.

RESPIRATOR REQUIREMENTS..... If operating conditions create a high vapor/mist concentration or if the product is sanded or ground, use of a NIOSH approved TC-23C organic vapor/ hepa filter combination cartridge is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE..... Mixture

PHYSICAL FORM..... Paste

APPEARANCE/ODOR..... White; Slight odor

ODOR THRESHOLD..... Not available.

PH AS IS..... Not Applicable

BOILING POINT..... Not Applicable

MELTING/FREEZING POINT..... Not Applicable

SOLUBILITY IN WATER..... Insoluble

PARTITION COEFFICIENT
(n-octanol/water)..... Not Applicable

SPECIFIC GRAVITY (WATER=1)..... 1.400

EVAPORATION RATE..... Not Applicable

VAPOR PRESSURE (mmHg)..... Not Applicable

VAPOR DENSITY (air = 1)..... Not Applicable

VOLATILES..... Nil

AUTOIGNITION..... Not available.

FLASH POINT..... Not Applicable

OXIDIZING PROPERTIES..... Not Applicable

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10. STABILITY AND REACTIVITY

STABILITY.....	Stable
MATERIALS TO AVOID.....	Strong oxidizing agents, acids, and alkaline materials.
HAZARDOUS DECOMPOSITION PRODUCTS...	Carbon dioxide, carbon monoxide, oxides of nitrogen and unknown organics. Thermal decomposition products are hazardous and/or toxic.

11. TOXICOLOGICAL INFORMATION

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

ROUTE OF ENTRY.....	Skin absorption; Inhalation
EFFECTS OF CHRONIC EXPOSURE.....	The toxicological properties of this product have not been fully evaluated. Use of good industrial hygiene practices is required. Avoid direct contact with skin or eyes. Do not ingest or inhale.
TARGET ORGANS.....	Eyes; Skin; Respiratory system; Kidneys; Blood/hematopoietic; Central nervous system.
CARCINOGEN.....	No.
SENSITIZER.....	Yes.

TOXICOLOGY INFORMATION

RAW MATERIAL NAME.....	Epoxy cresol novolac
NOTES ON ORAL TOXICITY.....	Slightly toxic.
NOTES ON DERMAL TOXICITY.....	Frequent or prolonged skin contact may irritate the skin and cause skin sensitization.
NOTES ON INHALATION TOXICITY.....	May cause allergic respiratory reaction.
NOTES ON EYE IRRITATION.....	Particulates may scratch eye surfaces/cause mechanical irritation.
OTHER NOTES ON TOXICITY.....	Sensitizer.
RAW MATERIAL NAME.....	Bisphenol A/Epichlorohydrin based epoxy resin
ORAL LD50, SPECIES TESTED.....	>2.0 g/kg Rat; 30.0 g/kg Rat; 20.0 g/kg Mouse
NOTES ON ORAL TOXICITY.....	Low order of toxicity.
DERMAL LD50, SPECIES TESTED.....	>2000.0 mg/kg Rabbit
NOTES ON DERMAL TOXICITY.....	Frequent or prolonged contact may irritate the skin.
NOTES ON INHALATION TOXICITY.....	Dust may be irritating to eyes and respiratory tract.
NOTES ON EYE IRRITATION.....	Particulates may scratch eye surfaces/cause mechanical irritation.

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OTHER NOTES ON TOXICITY..... This chemical was found to be positive in one or more mutagenetic assays.

RAW MATERIAL NAME..... Ethyleneglycol monobutyl ether acetate

ORAL LD50, SPECIES TESTED..... 2400.0 mg/kg Rat; 3200.0 mg/kg Mouse

NOTES ON ORAL TOXICITY..... May cause gastrointestinal irritation, abdominal pain, nausea and vomiting.

DERMAL LD50, SPECIES TESTED..... 1500.0 mg/kg Rabbit

NOTES ON DERMAL TOXICITY..... Frequent or prolonged contact may irritate and cause dermatitis. May be absorbed through the skin.

NOTES ON INHALATION TOXICITY..... Vapors and/or aerosols may cause irritation. Prolonged exposure to high levels can cause headache, dizziness, drowsiness and other nervous system effects.

NOTES ON EYE IRRITATION..... Irritating, and may injure eye tissue if not removed promptly.

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS..... Waste disposal should be in accordance with existing federal, state and local environmental regulations.

EMPTY CONTAINER WARNINGS..... Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

14. TRANSPORTATION INFORMATION

DOT INFORMATION

DOT SHIPPING NAME..... Not noted

DOT HAZARD CLASS..... Not noted

DOT REPORTABLE QUANTITY..... Not noted

15. REGULATORY INFORMATION

TSCA..... All components are on the TSCA inventory.

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STATE LAWS..... California Proposition 65: WARNING:
This product contains a chemical
known to the state of California to
cause cancer: Benzene. WARNING:
This product contains a chemical
known to the State of California to
cause birth defects or other
reproductive harm: Benzene.

SARA/TITLE III, THIS PRODUCT CONTAINS (OR IS) A TOXIC CHEMICAL FOR
ROUTINE ANNUAL CHEMICAL RELEASE REPORTING UNDER SECTION 313:

Carbitol Acetate...CAS# 112-15-2

The information given and the recommendations made herein apply to our
product(s) alone and are not combined with other product(s). Such are
based on our research and on data from other reliable sources and are
believed to be accurate. No guaranty of accuracy is made. It is the
purchaser's responsibility before using any product to verify this data
under their own operating conditions and to determine whether the product
is suitable for their purposes.

16. OTHER INFORMATION

MSDS DATE..... November 19, 1998
CHANGES SINCE PREVIOUS ISSUE..... Section 2

FOR REGULATORY INFORMATION, CONTACT:

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