

\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME..... Ablebond 8900NC  
 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

<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION RANGE (%)</u>
Epoxy Resin	Proprietary	60-100
Polymeric resin	Proprietary	15-40
Curing agent & Hardner	Proprietary	1-5

3. HAZARDS IDENTIFICATION

Emergency Overview

Yellowish paste.

Danger! Corrosive. May cause moderate skin and severe eye irritation. May cause skin sensitization. Risk of sensitization depends on duration and level of exposure.

EYE.....	Irritating, and will injure eye tissue if not removed promptly.
SKIN CONTACT.....	Irritating to the skin. May be absorbed through the skin. May cause skin sensitization, a partial or whole-body dermatitic rash experienced after exposure, however minimal.
INHALATION.....	Irritating and/or toxic vapors may be released at elevated temperatures. Vapors may be irritating to respiratory system and nasal passages.
INGESTION.....	May cause gastrointestinal irritation, diarrhea, nausea and vomiting.

4. FIRST-AID MEASURES

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EYE..... Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower lids. If irritation persists, get medical attention.

SKIN CONTACT..... Flush exposed areas thoroughly with 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..... Get medical attention.

5. FIREFIGHTING MEASURES

AUTOIGNITION..... Not available.

FLASH POINT..... Not available

EXTINGUISHING MEDIA..... Foam; CO2; 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 Available

LOWER EXPLOSION LIMIT (%)..... Not Available

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES..... Scrape up and place in suitably labeled container for disposal.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE..... - 40<sup>0</sup> C

SPECIAL SENSITIVITY..... Heat

HANDLING/STORAGE..... Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>COMPONENT</u>	<u>EXPOSURE LIMITS</u>
VENTILATION REQUIREMENTS.....	Vent curing oven to outdoors.

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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.....	If product is spilled on clothes, remove immediately and launder before reuse.
WASH REQUIREMENTS.....	If contact has occurred, wash with soap and water before eating.
RESPIRATOR REQUIREMENTS.....	NIOSH approved respirator if required. Self-contained breathing apparatus in emergency and non-routine situations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE.....	Mixture
PHYSICAL FORM.....	Paste
APPEARANCE/ODOR.....	Yellowish
ODOR THRESHOLD.....	Not available
PH AS IS.....	Not available
BOILING POINT.....	Not available
MELTING/FREEZING POINT.....	Not available
SOLUBILITY IN WATER.....	Insoluble
PARTITION COEFFICIENT (n-octanol/water).....	Not available
SPECIFIC GRAVITY (WATER=1).....	1.3
BULK DENSITY.....	Not available
EVAPORATION RATE.....	Not available
VAPOR PRESSURE (mmHg).....	Not available
VAPOR DENSITY (air = 1).....	Not available
VISCOSITY.....	Not available
VOLATILES.....	Not available
VOLATILE ORGANIC COMPOUNDS.....	Not available
AUTOIGNITION.....	Not available
FLASH POINT.....	Not available
OXIDIZING PROPERTIES.....	Not available

## 10. STABILITY AND REACTIVITY

STABILITY.....	Stable
MATERIALS TO AVOID.....	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.

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11. TOXICOLOGICAL INFORMATION

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CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

ROUTE OF ENTRY.....	Skin, Inhalation
EFFECTS OF CHRONIC EXPOSURE.....	Repeated exposure may cause skin sensitization. This product has not been tested for mutagenicity. Epoxy resins similar to those used in this formulation have been tested and have produced equivocal mutagenic activity. The relevance of those findings to toxicological impact on humans is unknown. 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.....	Skin
CARCINOGEN.....	No
SENSITIZER.....	Yes

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12. ECOLOGICAL INFORMATION

Not available.

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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.

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14. TRANSPORTATION INFORMATION

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DOT INFORMATION

DOT SHIPPING NAME.....	Not regulated
UN/ID Number.....	NA
Class .....	NA

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Packaging Group ..... NA  
Subsidiary risk ..... NA  
Label ..... NA

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15. REGULATORY INFORMATION

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TSCA.....All components are in compliance with TSCA requirements.  
STATE LAWS..... WARNING: This product contains the following chemicals known to the State of California to cause cancer: Glycidol, Benzene and Formaldehyde are present in trace amounts.  
  
WARNING: This product contains the following chemical known to the State of California to cause birth defects or other reproductive harm: Toluene and Benzene are present in trace amounts.

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

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.

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16. OTHER INFORMATION

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MSDS DATE..... October 11,'01  
CHANGES SINCE PREVIOUS ISSUE..... Not applicable

FOR REGULATORY INFORMATION, CONTACT:  
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National Starch & Chemical Company  
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USA  
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