



MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME EPOXY 2000, B COMPONENT

MSDS REVISION NUMBER 3

MANUFACTURER COLOR-CROWN CORPORATION
928 SLIGH AVE
SEFFNER, FLORIDA 33584

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REVISION DATE JANUARY 2006

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EMERGENCY OVERVIEW

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HMIS/NFPA HEALTH 3 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL FORM Mobile liquid

Color-Crown Colorless

ODOR Irritating

HAZARDS Corrosive to eyes. Corrosive to respiratory system. Corrosive to skin. Severe eye irritant. Severe respiratory tract irritant. Severe skin irritant. May cause skin sensitization.

EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In Case of large fire use: alcohol foam, water spray. In case of small fire use: carbon dioxide (CO2), dry chemical, dry sand or limestone.

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C.A.S CHEMICAL NAME Mixture

SYNONYMS None

CHEMICAL FAMILY Cycloaliphatic Amine

EMPIRICAL FORMULA

Mixture

INTENDED USE

Curing Agent

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SECTION 2 - INGREDIENTS  
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NUM	%	CAS Number and Chemical Name	
1.	>40.00	100-51-6	BENZYL ALCOHOL
2.	<30.00	2855-13-2	ISOPHORONEDIAMINE (IPD)

The remaining components are trade secret.

## OSHA (ACGIH) EXPOSURE LIMITS

		TWA	STEL		CEILING		
		ppm	mg/m3	ppm	mg/m3	ppm	mg/m3
1.	OSHA	N/E	N/E	N/E	N/E	N/E	N/E
	ACGIH	N/E	N/E	N/E	N/E	N/E	N/E
2.	OSHA	N/E	N/E	N/E	N/E	N/E	N/E
	ACGIH	N/E	N/E	N/E	N/E	N/E	N/E

N/E = Not Established.

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SECTION 3 - HEALTH HAZARDS  
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## ROUTES OF EXPOSURE

- Eye Contact
- Skin Contact
- Ingestion
- Inhalation
- Skin Absorption

## EXPOSURE STANDARDS

No standards established for the product. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

## HEALTH HAZARDS

- Corrosive to eyes.
- Corrosive to respiratory system.
- Corrosive to skin.
- Severe eye irritant.
- Severe respiratory tract irritant.
- Severe skin irritant.
- May cause skin sensitization.

## TARGET ORGANS

- Eye

Skin  
Respiratory system

#### SIGNS AND SYSTEMS OF EXPOSURE (Acute effects)

Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. The effect is transient and has no known residual effect. Burns of the eye may cause blindness. Contact with the skin may cause dryness (defatting), itching and/or rash. Contact with undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis, and permanent injury.

Inhalation of vapors may severely damage contacted tissue and produce scarring. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring.

Risk of exposure to hazardous concentrations of vapor under normal working conditions in a well ventilated space is minimal. However, conditions such as spraying, or sudden release of hot liquid, which generate an aerosol, mists or fog should be avoided.

Product is absorbed through the skin and may cause nausea, headache and general discomfort.

#### SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)

Repeated and/or prolonged exposure may cause allergic reaction/sensitization.

Repeated and/or prolonged exposures may result in: adverse respiratory effects (such as cough, tightness of chest or shortness of breath), adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as defatting, rash, or irritation), adverse skin effects (such as rash, irritation or corrosion).

Effects from inhalation of vapors may be delayed. Dryness of nasal passages may be experienced when material is inhaled over a long period of time. Repeated and/or prolonged exposure to low concentrations of vapor may cause: sore throats which are transient.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Asthma  
Chronic respiratory disease (e.g. Bronchitis, Emphysema)  
Eye disease  
Skin disorders and Allergies

#### CARCINOGENS UNDER OSHA, ACGIH, NTP, IARC, OTHER

This product contains no carcinogens in concentrations of 0.1 percent or greater.

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SECTION 4 - FIRST AID  
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EYE CONTACT  
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Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice.

SKIN CONTACT

Remove product and immediately flush affected area with water for at least 15 minutes. Remove contaminated clothing and shoes. Destroy contaminated leather apparel. Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. Do not apply greases or ointments. Control shock, if present. Launder contaminated clothing prior to reuse.

INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Prevent aspiration of vomit. Turn victim's head to the side. Seek medical advice.

INGESTION

In the event of ingestion, administer 3-4 glasses of milk or water. Do not induce vomiting. Seek medical advice.

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SECTION 5 - FIRE AND EXPLOSION DATA  
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FLASH POINT (Closed cup) >93.33 C (>199.99 F)

UPPER EXPLOSION LIMIT (UEL) No Data

LOWER EXPLOSION LIMIT (UEL) No Data

AUTOIGNITION TEMPERATURE No Data

FIRE HAZARD CLASSIFICATION (OSHA/NFPA)  
Class IIIIB

EXTINGUISHING MEDIA

Ignition will give rise to a Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand or limestone.

SPECIAL FIRE FIGHTING PROCEDURES

A face shield should be worn. Firefighters should wear butyl rubber boots, gloves, and body suit and self-contained breathing apparatus.

Retain expended liquids from fire fighting for later disposal.

#### UNUSUAL FIRE AND EXPLOSION MEASURES

May generate toxic or irritating combustion products.  
Contact of liquid with skin must be prevented.  
Sudden reaction and fire may result if product is mixed with an oxidizing agent.  
May generate carbon monoxide gas.  
May generate toxic nitrogen oxide gases. May generate ammonia gas. Personnel in vicinity and downwind should be evacuated.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**  
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**CONTAINMENT TECHNIQUES** (Removal of ignition sources, diking ect)  
Stop the leak, if possible. Ventilate the space involved. Reduce vapor spreading with water spray. Shut off or remove all ignition sources. Construct a dike to prevent spreading (includes molted liquid until they freeze).

#### CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

#### OTHER EMERGENCY ADVICE

Open enclosed spaces to outside atmosphere. Wear protective clothing, boots, gloves, and eye protection.

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**SECTION 7 - HANDLING AND STORAGE**  
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#### STORAGE

Keep away from: acids, oxidizers. Keep in cool, dry, entilated storage and in closed containers. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store in reactive metal containers.

#### HANDLING

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well ventilated work space. When handling, do not eat, drink, or smoke.

#### OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

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### SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

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#### EYE PROTECTION

Full face shield with goggles underneath.

#### HAND PROTECTION

Neoprene rubber gloves. Impermeable gloves. Cuffed butyl rubber gloves. Nitrile rubber gloves.

#### RESPIRATORY PROTECTION

Not required under normal conditions in a well-ventilated workplace. An organic vapor respirator National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors is recommended under emergency conditions.

#### PROTECTIVE CLOTHING

Impervious clothing. Slicker suit. Rubber boots. Full rubber suit (rain gear). Butyl or latex protective clothing.

#### ENGINEERING CONTROLS

No specific controls needed.

#### WORK AND HYGENIC PRACTICES

Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking, or using the toilet. Promptly remove clothing that becomes contaminated. Use appropriate hand and skin lotions to protect the skin. Discard contaminated leather articles.

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### SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

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PHYSICAL FORM	Mobile liquid
COLOR	Colorless
ODOR	Irritating
pH	9.00
VAPOR PRESSURE ( mm Hg at 21C (70F) )	<10.33835

VAPOR DENISTY (Air = 1)	No Data
BOILING POINT	205.00 C (401.00 F)
MELTING POINT	No Data
SOLUBILITY IN WATER	<1.00%
SPECIFIC GRAVITY (Water = 1)	1.03
MOLECULAR WEIGHT	Mixture

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SECTION 10 - STABILITY AND REACTIVITY  
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CHEMICAL STABILITY  
Stable

CONDITIONS TO AVOID (if unstable)  
Not applicable

INCOMPATIBILITY (Materials to Avoid)  
Mineral acids (i.e. sulfuric, phosphoric, etc.). Organic acids (i.e. acetic acid, citric acid etc.). Oxidizing Agents (i.e. perchlorates, nitrates etc.). Reactive metals (i.e. sodium, calcium, zinc etc.). Sodium or Calcium Hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV =2 ppm). Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritation and toxic fumes at elevated temperatures. Nitric acid in a fire. Aldehydes. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

HAZARDOUS POLYMERIZATION  
Will not occur

CONDITIONS TO AVOID (if polymerization may occur)  
Not applicable

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SECTION 11 - TOXICOLOGICAL PROPERTIES  
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ACUTE ORAL TOXICITY (LD50, RAT)  
2300.00 mg/kg

ACUTE DERMAL TOXICITY (LD50, RABBIT)  
>2800.00 mg/kg (Estimate)

ACUTE INHALATION TOXICITY (LC50, RAT)  
>10.00 mg/L / 1 hr (No deaths) (Estimate)

OTHER DATA

Toxicity data from similar products. Industrial chemicals such as this material with acute toxicity values shown above and whose vapors or mists are not likely to be encountered by humans when used in any reasonably foreseeable manner would not require a toxic label according to the U.S. domestic and international transport regulations.

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Corrosive to the skin of a rabbit.

CHRONIC/SUBCHRONIC DATA

No delayed, subchronic or chronic test data are known.

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SECTION 12 - ECOLOGICAL INFORMATION  
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NO DATA

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SECTION 13 - DISPOSAL CONSIDERATIONS  
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WASTE DISPOSAL

Comply with all Federal, State, and Local Regulations.

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SECTION 14 - TRANSPORT INFORMATION  
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DOT NON-BULK SHIPPING NAME                      Paint, 3, UN 1263, PG III

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SECTION 15 - REGULATORY INFORMATION  
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US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA) -

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.



OSHA Hazard Communication Standard (29CFR1910.1200)  
Hazard class(es) Corrosive. Sensitizer.

EPA SARA Title III Section 312 (40CFR370)  
Hazard class. Immediate Health Hazard. Delayed Health Hazard.

EPA SARA Title III Section 313 (40CFR372)  
Toxic chemicals above "deminimis" level are  
None

STATE REGULATIONS

PROPOSITION 65 SUBSTANCES (component(s)) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")  
None

NEW JERSEY TRADE SECRET REGISTRY NUMBER(S)  
05995

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SECTION 16 - INTERNATIONAL REGULATIONS  
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CANADA

DSL  
Included on Inventory.  
WHMIS HAZARD CLASSIFICATION  
Class D Division 2B, Class E Corrosive,  
ISOPHORONEDIAMINE (IPD)  
BENZYL ALCHOL  
WHMIS SYMBOLS  
Test Tube/hand, Stylized T,

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