



# MATERIAL SAFETY DATA SHEET

**Nippon Polyurethane Industry Co., Ltd**  
 Overseas Sales Department  
 1-23, SHIBA 4-CHOME, MINATO-KU, TOKYO, JAPAN  
 108-0014  
 Phone: 81-3-5439-8623 Fax: 81-3-5439-8633

Date of printing: January 23, 2002  
 Version: No.7  
 Date of revision: December 23, 2000  
 Date of issue: June 11, 1987

## Product Name: CORONATE HX-90B

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	<b>CORONATE HX-90B</b>
<b>General description</b>	Modified polyisocyanate solution
<b>Manufacturer</b>	<b>Nippon Polyurethane Industry Co., Ltd.</b> 1-23, SHIBA 4-CHOME, MINATO-KU, TOKYO, JAPAN
<b>Emergency telephone number</b>	Overseas Sales Department 81-3-5439-8623 (Monday - Friday, 9:00 a.m. - 6:00 p.m.)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL NAME</u>	<u>WT%</u>	<u>CAS REGISTRY</u>
Butyl acetate	10	123-86-4
Modified polyisocyanate	90	Trade Secret
<b>CONTROL PARAMETERS</b>		
Butyl acetate	Flammable Liquid	100ppm
		150ppm
		200ppm
		Japan Society for Occupational Health (TLV-TWA)1995
		ACGIH(TLV-TWA)1976
		ACGIH(TLV-STEL)1976

### 3. HAZARDS IDENTIFICATION

<b>EMERGENCY OVERVIEW</b>	Flammable liquid. Acute toxic material. May formulate explosive gas mixture with air.
<b>POTENTIAL HEALTH EFFECT</b>	May cause irritation to eyes, nose and respiratory tract. May have narcotic effect

### 4. FIRST AID MEASURES

**EYE CONTACT**  
 Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes.  
 Seek immediate medical advice.

**SKIN CONTACT**  
 Remove all contaminated clothing and shoes immediately. Wash the contaminated area thoroughly with water followed by soap. If irritation persists or inflammation is caused, seek medical advice.



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### INHALATION

Remove the patient immediately to an area with fresh air. Seek medical attention.

### INGESTION

If swallowed, seek medical advice immediately. Wash out mouth with water.

Do not induce vomiting. Try to get the patient to vomit if he is positive.

## 5. FIRE FIGHTING MEASURES

Flash point (°C)	50.0, determined by closed cup flash test.
Autoignition point (°C)	None
Range of explosion	None
Flammability	Y
Combustibility	N
Oxidizibility	N
Self reactivity	N
Dust explosion	N

### GENERAL HAZARD:

During a fire, aerosols or gases may be generated through decomposition.

### FIRE FIGHTING INSTRUCTIONS:

Positive pressure self-contained breathing apparatus and full protective clothing and gloves should be provided.

Splash water onto drums and facilities which are not on fire to avoid fire spreading and heat evolved.

After the fire is extinguished, neutralize the spilled material with decontaminant

Restrict entry of unauthorized personnel.

**EXTINGUISHING MEDIA:** dry chemical powder, carbon dioxide, water and foam.

## 6. ACCIDENTAL RELEASE MEASURES

### GENERAL

Immediately remove all sources of ignition and flammable material. In case of fire, use powder or foam as extinguishing media. Full protective equipment including respiratory protective apparatus should be worn.

Restrict entry of unauthorized personnel.

Stay in windward position at the time of disposal.

The hazard area should be well-ventilated.

Safely stop discharge.



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### SMALL SPILL:

Neutralize the leakage/spillage with decontaminant, or by admixing it with sand, clay or sawdust.

Dispose of in a closed chemical waste container.

### LARGE SPILL:

Admix with sand, clay or sawdust to prevent the spillage/leakage from further spreading out.

Dispose of in a chemical waste container. This container should not be closed.

Neutralize the residues with decontaminant.

Wash the spillage area clean with water.

## 7. HANDLING AND STORAGE

### HANDLING

The operator should be trained in handling this product.

Appropriate safety measures and protective equipment should be used for this operation.

Provide adequate ventilation and the operator should use protective equipment.

When the drum is pressurized, unscrew the bung slowly to release the pressure before taking it off.

This product should not be filled in an unwashed or wet container.

The use of fire is strictly prohibited in the work area.

Adequate engineering control should be provided for anti-static electricity.

Those who show allergenic and sensitizing effects should not be in charge.

### STORAGE

Keep container properly sealed and store indoors in a well ventilated area.

Once opened, the container should be closed and sealed with nitrogen gas or dry air at below -30°C.

If stored outdoors, the container should be covered with waterproof canvas sheet to avoid being exposed in the rain.

The use of fire is strictly prohibited in the work area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS

Local exhaust ventilation should be provided for indoors use.

Readily accessible eye and hand wash stations should be provided.

### PERSONAL PROTECTION

Chemical goggles, rubber gloves and suitable

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Examples of protective equipments: respiratory equipment.  
Respiratory apparatus: JIS T 8155  
Air mask: JIS T 8153  
Gas mask: JIS T 8152  
**EXPOSURE LIMIT:** Refer to Section 2

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical Form	Liquid
Color	Pale yellow
Odor	Solvent
Boiling Point (°C)	None
Vapor Pressure	None
Evaporation Rate	None
Freezing Point (°C)	None
Specific Gravity (---/°C)	1.128/23
Initial Boiling Point(°C)	-
Viscosity	300 mm <sup>2</sup> /s at 23 C
Solubility (water)	Insoluble
Solubility (other)	Soluble in toluene, ethyl acetate or acetone

Note: The above data are typical physical properties and should not be taken as a specification.

**10. STABILITY AND REACTIVITY****CHEMICAL STABILITY(CONDITION TO AVOID)**

High temperature and moisture.

**INCOMPATIBILITY**

This product reacts with materials with active hydrogen groups such as amines and alcohols.

**HAZARDOUS DECOMPOSITION PRODUCT**

Reaction with water produces heat and CO<sub>2</sub> gas.

**HAZARDOUS POLYMERIZATION**

will occur. It gets polymerized by alkaline materials or tertiary amines.



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### 11. TOXICOLOGICAL INFORMATION

CORROSIVE PROPERTIES	Not Available
IRRITANT PROPERTIES	(For butyl acetate) May cause slight irritation on throat with 200 ppm, and on eyes and nose with 300 ppm. Will not cause corneal edema.
ALLERGERIC & SENSITIZING EFFECTS	Not Available
ACUTE TOXICITY	(For butyl acetate) Inhalation LC50(rat) 2,000ppm/4h Oral LD50(rat) 14,000mg/kg
SUB-ACUTE TOXICITY	Not Available
CHRONIC TOXICITY	(For butyl acetate) Exposure to 3,100-4,200 ppm (6 days, 6 hrs/day) caused trace of fatigue, weight decrease, increase in effective constituent parts of the blood and hemoglobin.
CARCINOGENIC EFFECTS	Not Available
MUTAGENIC EFFECTS	(For butyl acetate) The test results about mutagenic effects by salmonella are all negative.
EFFECTS ON THEREPRODUCT SYSTEM	Not Available
TERATOLOGIC EFFECTS	Not Available
OTHERS	Not Available

### 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY	Not Available
BIOACCUMULATION	Not Available
FISH TOXICITY	Not Available
OTHER INFORMATION ON ECOTOXICITY	
(For butyl acetate)log Pow	1.82
	(octanol/water partition coefficient)

### 13. DISPOSAL CONSIDERATIONS

#### DISPOSAL METHOD

This product should be incinerated in an appropriate facility.

This product should be treated by authorized agents professionally trained in disposing

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industrial waste.

**HANDLING EMPTY CONTAINER AFTER USE**

Empty drum should be left to stand with water and left unsealed for 24 hours. Water should subsequently be removed afterward.

Used container should be punctured and scrapped.

**14. TRANSPORT INFORMATION**

Proper Shipping Name : Flammable liquid (butyl acetate)  
Hazardous Class : Resin Solution  
Identification No : UN1866  
IMO No. : Class 3.3/Flammable Liquid

Follow all the regulations in your country.

Be sure that the container is tightly sealed, that no leakage is found and that all the necessary indications are specified.

Filing, loading and extracting operations should be performed under the supervision of an authorized operator.

Nitrogen gas or dry air should be charged into the container for transportation after filing or extracting.

**15. REGULATORY INFORMATION**

Regulatory information with regard to this substance in your country should be examined by your own responsibility.

**16. OTHER INFORMATION**

Reason for issue : Update to New Format  
Prepared by : Technical Department

All the chemical materials may present unknown hazards and should be used in caution.

The information herein is given in good faith, but no warranty, express or implied is made.

Consult Nippon Polyurethane Industry. Co. Ltd. for further information.