

## MATERIAL SAFETY DATA SHEET

Required under OSHA's Hazard Communication Standard 29 CFR 1910.1200

## IDENTITY(As Used on Label and List)

POLY BOND E

## Section I

Manufacturer's Name NITTA CORPORATION	Emergency Telephone Number 81-6-6563-1225 (NITTA CORPORATION, OSAKA, JAPAN)
Address(Number,Street,City,State,and ZIP Code) 4-26, SAKURAGAWA 4-CHOME, NANIWA-KU, OSAKA, 556-0022, JAPAN	Telephone Number for Information 81-6-6563-1225 (NITTA CORPORATION, OSAKA, JAPAN)
	Date Prepared 11. JUN. 2009
	Signature of Preparer(optional)

## Section II -Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity ; Common Name(s))	CAS No.	OSHA PEL TWA	ACGIH TLV TWA	Other Limits Recommended MSHA TWA	% (optional)
Ethyl Acetate(E-A)	141-78-6	400ppm	400ppm (1440mg/m3)	400ppm (1400mg/m3)	71
DOT Flammable Liquid					
Polyisocyanate(NCO)	4151-51-3	None	None	None	27
Chlorobenzene	108-90-7	75ppm	75ppm	75ppm (350mg/m3)	2
DOT Flammable Liquid					

## Section III -Physical/Chemical Characteristics

Boiling Point	77 °C(E-A)	Specific Gravity (H2O = 1)	0.90(E-A)
Vapor Pressure(mm Hg)	65mmHg at 20°C(E-A)	Melting Point	-82.4 °C(E-A)
Vapor Density(AIR = 1)	3.04(E-A)	Evaporation Rate (Butyl Acetate = 1)	5.25(E-A)
Solubility in Water	1 ml/10ml Water at 25°C(E-A) React with water forming CO2 (NCO)		
Appearance and Odor	Yellow to Brownish Liquid , Esterlike Odor		

## Section IV -Fire and Explosion Hazard Data

Flash Point(Method Used) -4 °C(E-A) (Closed Cup)	Flammable Limits Vol.%	LEL 2 (E-A)	UEL 11.5 (E-A)
Extinguishing Media	Extinguishing Powder , CO2 or Halones. In case of bigger fires , also Form and Water Spray.		
Special Fire Fighting Procedures	Wear Rubber Gloves, Safety Goggles with Face Shield, Protective Clothing and self-contained Breathing Apparatus		

## Unusual Fire and Explosion Hazards

None under Normal Conditions. When Exposed to Heat or Flame, can React with Oxidizing Materials.  
Combustion Products may be Toxic.

**Section V – Reactivity Data**

Stability	Unstable		Condition to Avoid
	Stable	×	

**Incompatibility ( Materials to Avoid )**

Water , Alcohol , Amine , Acids and Alkali

**Hazardous Decomposition or Byproducts**Combustion will product CO<sub>2</sub> ( and probably CO ) and Nitrogen Oxides.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	×	

**Section VI – Health Hazard Data**

Route(s) of Entry:	Inhalation ? ×	Skin ? ×	Ingestion ? ×
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**Health Hazards (Acute and Chronic)**

Eye ; Irritant

Skin ; Irritant

Toxic ; LD50 (Oral-Rat) 5600mg/kg (E-A)

Carcinogenicity:	NTP ? None	IARC Monographs? None	OSHA Regulated? None
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**Signs and Symptoms of Exposure**

Excessive Exposure can result in Irritating to Eyes and Skin.

**Medical Conditions****Generally Aggravated by Exposure**

Eye , Skin Irritation. Mild Narcosis.

**Emergency and First Aid Procedures**

In case of contact, immediately flush eyes or skin with plenty of water at least 15min. Call a physician. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. If inhaled, remove

to fresh air. Call a physician.

**Section VII – Precautions for Safe Handling and Use****Steps to Be Taken in Case Material is Released or Spilled**

Remove all sources of ignition. Reduce vapors by ventilation.

Take up with sand or absorbent materials. Sweep or shovel into approved disposal container.

flush area with water.

**Waste Disposal Method**

Incinerate only in officially approved incinerator.

Dispose in accordance with Federal, State and Local Regulations.

**Precautions to Be Taken in Handling and Storing**

Store in cool, dry, dark and well-ventilated place. Avoid moisture.

Do not use near heat, sparks and flames. Keep the bottle closed when not in use.

**Other Precautions**

Avoid contact with skin or eyes, breathing vapor or mist.

**Transport information**

UN number: 1133 (Adhesive, containing inflammable liquid) Packaging group: II Label: 3

Observe the Fire Defence Law.

Containers must be piled firmly and orderly to avoid falling, tumbling and breaking

**Section VIII – Control Measures****Respiratory Protection (Specify Type)**

Use adequate ventilation in working area

Ventilation	Local Exhaust	Special
	Acceptable	Preferred
	Mechanical (General)	Other
	Preferred	Preferred

Protective Gloves	Rubber Gloves	Eye Protection	Safety Goggles
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Other Protective Clothing or Equipment	Protective Clothing
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Work/Hygienic Practices	Not Known
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