

# SAFETY DATA SHEET

# ECO LINER PART B

Last updated September 2014

## Product Identification

Product Name: Nanotech Coatings ECO Liner Part B

Health:	3
Fire:	1
React:	2
Personal Protection:	B

## Hazardous Ingredients

Ingredient	Concentration	C.A.S. Number	LD 50:	LC 50:
Diphenylmethane Diisocyanate (MDI)	100% w/w	9016-87-9	No data available	490 mg/m <sup>3</sup>

## Chemical and Physical Properties

<b>Vapor pressure:</b>	<0.00001 mmHg @ 25° C	<b>Vapor Density:</b>	Approx. 8.5 (air = 1)
<b>Solubility in Water:</b>	Reacts with water.	<b>Specific Gravity:</b>	1.24 (H <sub>2</sub> O = 1)
<b>Boiling Point:</b>	Decomposes prior to boiling.	<b>Freezing Point:</b>	Data not available.
<b>Evaporation Rate:</b>	Very Slow.	<b>pH</b>	Not applicable.
<b>Odor:</b>	Almost odorless	<b>Appearance:</b>	Dark brown liquid
<b>Decomposition Temp:</b>	>230° C (>446° F)	<b>V.O.C.</b>	0 gm/liter

## Flammability and Explosive Properties

**Flash Point:** >204° C (399° F) (closed cup).

**Recommended Extinguishing Agents:** CO<sub>2</sub>, Dry chemical or foam. AVOID WATER -REACTS WITH WATER. If water is used as extinguishing agent, use large amounts and wear protection against isocyanate and nitrogen oxide fumes. Wear positive pressure self contained breathing apparatus and full protective clothing.

**Unusual Fire & Explosion Hazards:** Evacuate persons from downwind of fire site. Do not re-seal contaminated containers.

**Hazardous Products Formed by Fire or**

**Thermal Decomposition:** Oxides of carbon & nitrogen, isocyanate vapors. Traces of hydrogen cyanide.

**Unusual Fire or Explosion Hazards:** Flammable

**Compressed Gasses:** None

**Pressure at Room Temp:** N.A.

**Sensitivity to Impact:** None.

**Sensitivity to Static Discharge:** None.

## Reactivity Data

**Stability:** Stable

**Incompatibility:** Water, acids, ammonia, alcohols, alkalies, metals, surfactants. Reactions may be violent. Reacts with water to form heat, carbon dioxide and insoluble urea. Water may cause pressure build-up in sealed containers.

**Hazardous Decomposition Products:** Isocyanate vapors, oxides of carbon and nitrogen. Traces of hydrogen cyanide.



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### Spill or Leak Procedures

Dike area to prevent spreading. Absorb on vermiculite, sand or other inert absorbing material and place into dry open top containers and remove to outdoors. Neutralise with 5% soda ash solution, 10 parts solution to 1 part waste. Let stand 48 hours prior to disposal.

Clean up with 5% soda ash solution allowing reaction to take place for 10 minutes. Destroy mops, brooms, and other clean up equipment by combustion. Used wash solutions must be disposed of according to all government regulations.

### Storage and Handling Procedures

**Storage:** Store in a cool, dry well ventilated area. Keep containers closed when not in use.

**Handling:** Mix well before using.

### Shipping Regulations

**DOT Classification:** Not Regulated

**Proper DOT Shipping Name:** Adhesive Liquid

**UN/NA Code - Class 55**

### Emergency Treatment Procedures

**Eye Irritation:** Wash well with plenty of water for 15 minutes. Lift eyelids occasionally. If irritation persists contact a physician.

**Skin Contact:** Wash well with plenty of soap and water. If irritation develops, contact a physician.

**Inhalation:** Remove to fresh air. If not breathing give artificial respiration. Contact a physician.

**Ingestion:** Give plenty of water or milk to drink. Do not induce vomiting. Consult a physician at once.

### Personal Protection

**Respiratory:** Respirator not usually required. General ventilation is sufficient.

**Skin:** The use of neoprene gloves is recommended. Long sleeved garments and long pants recommended. Impervious footwear is recommended. Rubber or plastic apron recommended.

**Eyes:** Chemical goggles for normal use conditions.

### Health Hazard Data

**Potential Routes of Entry:** Skin, eyes, inhalation.

**Symptoms of Overexposure:** May be irritant to eyes and skin at room temperatures. Elevated temperature exposure will irritate skin, eyes, respiratory tract.

**Effects of Chronic Exposure:** May cause lung damage.

**Exposure Limits:** ACGIH TLV 0.005 PPM. TWA & OSHA PEL 0.02 ppm (Ceiling for MDI)

**Sensitization of Product:** May cause respiratory sensitization.

**Carcinogenicity:** Lung tumors have been observed in laboratory animals exposed to 6 mg/m<sup>3</sup> for their lifetimes.

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### DISPOSAL

Dispose of in a landfill site according to all regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### IMPORTANT LIABILITY DISCLAIMER

The information contained in this Material Safety Data Sheet (MSDS) is believed to be correct as it was obtained from sources we believe are reliable. However, no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material, or the results to be obtained from the use thereof. User assumes all risks and liability of any use, processing or handling of any material, variations in methods, conditions and equipment used to store, handle or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at his sole discretion. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe work place, to examine all aspects of its operation and to determine if or where precautions, in addition to those described herein, are required.