



Castagra Products, Inc.

MATERIAL SAFETY DATA SHEET - ECODUR 201S PART B

MANUFACTURERS NAME:

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Section 1: Product Identification

PRODUCT NAME: ECODUR 201S (PART B)
PRODUCT NUMBER: 201S-B
WHMIS. CLASSIFICATION: D1b, D2a, D2b, F.
HMIS. CLASSIFICATION:
HEALTH: 3
FLAMMABILITY: 1
REACTIVITY: 2
PERSONAL PROTECTION: B
(FOR GENERAL USE)

Section 2: Hazardous Ingredients

INGREDIENT: DIPHENYLMETHANE DIISOCYANATE (MDI)
Diphenylmethane Diisocyanate, isomers and homologues
% w/w : 100
CAS #: 9016-87-9
TLV.: 0.02 ppm
LD 50: No Data Avail.
LC 50: 490 mg/m3

Section 3: Physical Data

ODOUR AND APPEARANCE: Almost odourless, dark brown liquid.
VAPOUR PRESSURE: <0.00001 mmHg @ 25° C.
VAPOUR DENSITY: Approximately 8.5 (air = 1).
EVAPORATION RATE: Very slow.
BOILING POINT (760 mmHg): Decomposes prior to boiling.
FREEZING POINT: No data available.
SOLUBILITY IN WATER: REACTS WITH WATER.
SPECIFIC GRAVITY: 1.24 (H2O = 1).
pH: Not applicable.
DECOMPOSITION TEMP.: >230 C (>446 F).
FLASH POINT - CLOSED CUP: >204 C (>399 F).

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Section 4: Fire and Explosion Data

FLAMMABILITY ?	Yes.
UNDER WHAT CONDITIONS ?	Extreme heat.
SPECIAL FIRE FIGHTING PROCEDURES:	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 down wind of fire site. Do not re-seal contaminated containers.
MEANS OF EXTINCTION:	CO ₂ , Dry chemical or foam. AVOID WATER
HAZARDOUS COMBUSTION PRODUCTS:	Oxides of carbon & nitrogen, isocyanate vapours. Traces of hydrogen cyanide.
FLAMMABLE LIMITS:	No data available.
FLASH POINT & METHOD:	> 205° C (PMCC)
AUTOIGNITION TEMPERATURE:	No data available.
DECOMPOSITION TEMPERATURE:	Approx. 330° C.
SENSITIVITY TO IMPACT:	None.
SENSITIVITY TO STATIC DISCHARGE:	None.

Section 5: Reactivity Data

CHEMICAL STABILITY:	Yes.
INCOMPATIBILITY WITH OTHER SUBSTANCES ?	Yes.
WHICH ONES ?	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 polymerization may be initiated by metal salts, strong bases or temperatures in excess of 175° C.
HAZARDOUS DECOMPOSITION PRODUCTS:	Isocyanate vapours, oxides of carbon and nitrogen. Traces of hydrogen cyanide.



Section 6: **Toxicological** **Properties**

ROUTES OF ENTRY: SKIN CONTACT, EYE CONTACT, INHALATION.
EFFECTS OF ACUTE EXPOSURE: 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)

IRRITANCY OF PRODUCT: May be irritant to eyes and skin.
SENSITIZATION OF PRODUCT: May cause respiratory sensitization.
CARCINOGENICITY: Lung tumours have been observed in laboratory animals exposed to 6 mg/m³ for their lifetimes.

TERATOGENICITY: No data available.
REPRODUCTIVE TOXICITY: No data available.
MUTAGENICITY: Test data inconclusive. Handle with great care.
SYNERGISTIC PRODUCTS: None known.

Section 7: Preventive **Measures**

PERSONAL PROTECTIVE EQUIPMENT:
GLOVES: Neoprene gloves recommended.
RESPIRATOR: Not usually required except for emergency situations.
EYE: Chemical goggles for normal use conditions.
FOOTWEAR: Impervious footwear is recommended.
CLOTHING: Long sleeved garments and long pants recommended.
OTHER: Rubber or plastic apron recommended.

ENGINEERING CONTROLS: Ventilate to keep vapours to below TLV.
LEAK AND SPILL PROCEDURES: Absorb onto mineral absorbent and place into dry open top containers & remove to outdoors. Neutralise with 5% soda ash solution, 10 parts solution to 1 part waste. Let stand 48 hours prior to disposal.

WASTE 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.

HANDLING PROCEDURES AND EQUIPMENT: Handle with great care. Read label and MSDS prior to use.

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

SHIPPING DATA: NOT REGULATED



Section 8: First Aid

- EYES: Wash well with plenty of water for 15 minutes. Lift eyelids occasionally. If irritation persists contact a physician.
- SKIN: 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 water or milk to drink. Do not induce vomiting. Consult a physician at once.

Section 9: Preparation Data

PREPARED BY: CASTAGRA PRODUCTS, INC.
DATE: 28 JUNE 2012

The information contained herein is based on data believed to be reliable by CASTAGRA PRODUCTS, INC. It is true and accurate to the best of our knowledge, but is not intended to be all inclusive. Users should consider this information as a supplement to other information gathered by them and must make their own determination of suitability and completeness to assure proper safe use and disposal of these materials.