

ELASTUFF 110 PART A

PRODUCT NAME: ELASTUFF 110 PART A
PRODUCT CODE: EF-110-A

~~~~ SECTION 1 ~~~~ MANUFACTURER IDENTIFICATION ~~~~

Manufacturer's Name : UNITED COATINGS MANUFACTURING CO
Address : 2810 SOUTH 18TH PLACE
 : PHOENIX, ARIZONA 85034
 : INITIAL (FIRST CALL) CHEMTREC (800) 424-9300
INFORMATION PHONE : (480) 754-8900
TOLL FREE : BACK-UP (800) 541-4383
DATE REVISED : May 2012

~~~~ SECTION 2 ~~~~ HAZARDOUS INGREDIENTS/SARA III INFORMATION ~~~~

Reportable Components	CAS Number	MM HG @ Temp	Weight %
* POLYMETHYLENE POLYPHENYLISOCYANATE	9016-87-9	.00001 68F/20C	<51
4,4'DIPHENYLMETHANE DIISOCYANATE, HPC, CAS#101-68-8, AMOUNT 45% TLV ACGIH 0.005 PPM TWA OSHA PEL 0.02PPM CEIL. MDI MIXED ISOMERS, HP, CAS#26447-40-5 AMOUNT <3.0% OCCUPATIONAL EXPOSURE LIMIT NOT ESTABLISHED. POLYMERIC MDI, CAS# 9016-87-9, <55%, OEL'S NOT ESTABLISHED. FOR TSCA PURPOSES THIS PRODUCT IS CONSIDERED 100% CAS#9016-87-9. CAS#101-68-8 IS SARA 313 REGULATED.			
* POLYISOCYANATE BASED ON MDI, APPROX. 76%. (22% MDI, CAS #101-68-8). MIXTURE POLYISOCYANATE BASED ON MDI, CAS#TRADE SECRET, APPROXIMATELY 76%, NJTSR NO. (NEW JERSEY TRADE SECRET REGISTRY NUMBER 31765300002-5317P) NO OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THIS CHEMICAL. DIPHENYLMETHANE DIISOCYANATE (MDI) (2,2; 2,4), CAS#26447-40-5, APPROXIMATELY 1.4%, NO OEL'S HAVE BEEN ESTABLISHED FOR THIS CHEMICAL. NON-ISOMER SPECIFIC CAS NUMBER INCLUDES 2,2' MDI AND 2,4' MDI. 4,4'-DIPHENYLMETHANE DIISOCYANATE (MDI), CAS #101-68-8, APPROXIMATELY 22%, OSHA-.02PPM CEILING, .20MG.M3 CEILING, ACGIH-.005PPM TWA, .051MG/M3 TWA.			
* Diphenylmethane diisocyanate homopolymer	101-68-81x10-5	77F/25C	<9
Diphenylmethane diisocyanate (generic MDI) (CAS# 26447-40-5) Contains <60% 4,4'-diphenylmethane diisocyanate (CAS#101-68-8) ACGIH TLV TWA: 0.005ppm, OSHA PEL, ceiling: 0.02ppm.			

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* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
#Indicates carcinogenic chemical.

Indicates carcinogenic chemical.

The hazards of both part A and part B will be exhibited when both parts are combined. This MSDS may be used for other colors and container sizes of this product.

~~~~ SECTION 3 ~~~~ HAZARDS IDENTIFICATION ~~~~

Potential Health Effects**Eyes:**

Contact with isocyanates may result in conjunctival

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irritation and mild corneal opacity. isocyanate is reported to induce chemical burns in rabbit eye studies. a similar degree of eye injury may develop after contact with human eyes.

Skin:

Absorption is believed to generally be too slow to produce signs of acute systemic poisoning. However, animal studies have shown that respiratory sensitization can be induced by skin contact with known respiratory sensitizers, including isocyanates. Isocyanates are a primary skin irritant--they react with skin protein and moisture and can cause irritation. Symptoms can include: redness, swelling, rash, scaling or blistering. Isocyanates are also strong skin sensitizers. Experience indicates that direct skin contact is the route of exposure most likely to cause skin sensitization. Once sensitized, an individual may react even to airborne levels below the tlv with the following symptoms; itching and tingling of the earlobes and neck, rash, hives, swelling of the arms and legs or other symptoms common to allergic dermatitis. These symptoms may be immediate or delayed several hours. Prolonged contact can cause reddening, swelling, rash, scaling or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor-only exposure.

Ingestion:

Ingestion could cause abdominal cramps, nausea and diarrhea.

Inhalation:

Repeated or prolonged exposure to vapors or mists are irritating to the respiratory tract. Inhalation of vapors and mists of isocyanate at concentrations above recommended exposure limits can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the intended recommended exposure level with similar symptoms as well as an asthma attack. Exposure to higher levels may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in the lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g., fever, chills) has also been reported.

~~~~ SECTION 4 ~~~~ FIRST AID MEASURES ~~~~

Eyes:

Immediately flush eyes with clean, lukewarm water for 15 minutes while lifting eyelids. Consult a physician or ophthalmologist immediately.

Skin:

Wash with plenty of soap and water. Remove contaminated clothing and shoes, wash before reuse. Consult a physician immediately.

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Ingestion:

Do not induce vomiting. Give 1 to 2 cups milk or water. If vomiting occurs, keep victim's head below the hips to prevent breathing vomit into the lungs. Consult a physician immediately.

Inhalation:

Remove from source of exposure and into fresh air. If not breathing, give artificial respiration. If symptoms persist consult a physician immediately.

Note to Physician:

Skin- this compound is a potent skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.
Ingestion- treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound.
Inhalation- treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from any exposure to isocyanate.

~~~~ SECTION 5 ~~~~ FIRE FIGHTING MEASURES ~~~~

Flammable Properties**Flash Point:** 199C/390F**Lower Flammable Limits:** N/A**Upper Flammable Limit:** N/A**Auto Ignition Temperature:**

NOT AVAILABLE

Extinguishing Media:

Use water fog, foam, or dry chemical extinguishing media.

Special Fire Fighting Procedures:

Personnel engaged in fighting isocyanate fires must be protected against nitrogen dioxide fumes as well as isocyanate vapors. Firefighters must wear self-contained breathing apparatus and turnout gear.

~~~~ SECTION 6 ~~~~ ACCIDENTAL RELEASE MEASURES ~~~~

Small Spill:

Clear the area of unnecessary personnel. Insure a trained response team is in emergency protective equipment. Prevent further spillage and contain the spill using dikes made of sand, earth or spill pillows. Cover the spill area with an absorbent material (e.g., absorbent clay, earth, sand) to absorb as much liquid as possible. Shovel the absorbent into open top containers. Do not fill to the top or cover the containers. Prepare a decontaminating solution as follows:

Option 1: consists of a solution 90% water, 8% concentrated ammonia solution and 2% liquid detergent.

Option 2: consists of a solution 90-95% water, 5-10% sodium carbonate and 0.2-0.5% liquid detergent.

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Pour the liquid decontaminant liberally over the remaining spill area and spread with a broom or squeegee to insure contact. Let stand 10-15 minutes @25c(77f), longer at lower temperatures. Then wash down the area with plenty of water. In a well ventilated area, add enough liquid decontaminant solution to the containers with the absorbed spill material to obtain an approximate 10:1 ratio of decontaminate solution to spill material. Mix the liquid-absorbent slurry and let stand for 12-24 hours. Stir periodically, or the liquid-absorbent slurry may solidify. Leave the lids on loosely. After decontamination solution has been in contact with the spilled material for 24-48 hours, and the evolved carbon dioxide has vented away, tighten down the lids and dispose of the mixture in accordance with local, state and federal regulations. Test the area for residual isocyanate vapors before allowing workers to re-enter the area. When safe working conditions have been re-established, remove and decontaminate all equipment used.

Large Spill:

Use same procedure as small spill.

~~~~ SECTION 7 ~~~~ HANDLING AND STORAGE ~~~~

Handling & Storage:

Store in tightly closed containers to prevent moisture contamination. Unused product remaining in opened containers must be purged with dry nitrogen before resealing to prevent co2 pressure build-up due to moisture contamination. If moisture or water contamination is suspected, do not reseal. Store in a cool dry, well ventilated area. Open sealed drums slowly to release any pressure due to possible co2 pressure build-up. Do not puncture, cut, grind, braze, weld or drill on or near this container. Containers, even those that have been emptied, will contain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full. Do not use pressure to empty container.

Other Precautions:

Avoid prolonged or repeated breathing of vapor or spray mist. If used indoors, provide mechanical exhaust ventilation. Use only in a well ventilated area. Wash thoroughly with soap and water before eating or smoking. Keep out of the reach of children. Do not get in eyes, on skin or on clothing. Avoid prolonged or repeated breathing of vapor.

Unused product remaining in opened containers must be purged with dry nitrogen before resealing to prevent co2 pressure build-up due to moisture contamination. If moisture or water contamination is suspected, do not reseal. Open sealed drums slowly to release any pressure due to possible co2 pressure build-up.

~~~~ SECTION 8 ~~~~ EXPOSURE CONTROLS/PERSONAL PROTECTION ~~~~

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Engineering Controls:

In outside spray, mixing and rolling applications situate workers upwind of operation & provide airflow in a downwind direction so as to carry fumes and residual spray away from workers.

In confined spaces, mechanical exhaust ventilation, with volume and pattern capable of maintaining a fresh air supply or airline respirator, may be necessary. Refer to OSHA standard 29 CFR 1910.94 and/or ACGIH industrial ventilation for guidance about adequate ventilation. Turn off heating and/or air conditioning equipment to prevent contaminating building. When possible spray when building or structure is unoccupied.

Respiratory Protection:

The hazards of both part A and part B will be exhibited when combined.

Good industrial hygiene practice dictates that when Isocyanate-based coatings are mixed/sprayed and applied, some Type of respiratory protection should be worn.

A properly fitted air-purifying (combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate containing spray/vapors during coating operations, and used in accordance with the recommendations of the manufacturer, can be used when the following conditions are met:

- concentration of vapors is unknown.
 - or concentrations exceed those in section II.
 - or the airborne Isocyanate (polymeric, oligomeric) concentration exceeds 5MG/M3 Averaged Over 8 Hours) OR 10 MG/M3 AVG OVER 15 Minutes
 - or operations are being performed in combined space.
 - and a NIOSH certified end of service life indicator or a change schedule based upon objective information or data is used to ensure that cartridges are replaced before the end of their service life.
- in addition, pre-filters should be changed whenever breathing resistance increases due to particulate buildup.
- if a NIOSH certified end of service life indicator or a change schedule based upon objective information or data cannot be met, then a supplied air respirator must be used.

Monitoring: Refer To Patty's Industrial Hygiene And Toxicology-Volume 1(3rd Edition) Chapter 17 Volume III (First Edition)Chapter 3, for guidance concerning appropriate air sampling strategy to determine airborne concentrations of Isocyanate.

Medical surveillance. supervision of all employees who handle or come in contact with this product is recommended. This should include pre-employment and periodical medical examinations with respiratory function test (fev, fvc as a minimum). persons with asthma-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with Isocyanate. Once a person is diagnosed as sensitized to Isocyanate, no further exposure can be permitted

Additional protective measures safety showers and eyewash stations should be readily available to work area. Educate and train employees

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in safe use of product. Follow all label instructions.

Skin Protection:

The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation. Note that PVA degrades in water.

Eye Protection:

Use chemical splash goggles and face shield (ANSI z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

~~~~ SECTION 9 ~~~~ PHYSICAL AND CHEMICAL PROPERTIES ~~~~

Boiling Range: 390F/200C - 694F/368C

Specific Gravity(H2O=1): 1.1939

Vapor Density(Air=1): Heavier than air

Evaporation Rate(N-Butyl Acetate=1) :

Coating V.O.C.: 0.0 lb/gl

Coating V.O.C.: 0 g/l

Material V.O.C.: 0.0 lb/gl

Material V.O.C.: 0 g/l

Solubility in Water: Slightly soluble

Appearance: Viscous, off-white liquid. **Odor:** Aromatic odor.

~~~~ SECTION 10 ~~~~ STABILITY & REACTIVITY DATA ~~~~

Stability:

Stable

Conditions To Avoid:

Avoid prolonged heating above 160 degrees F. Keep air tight and free of moisture.

Incompatible Materials:

Avoid contact with strong oxidizing agents. Contact with the following materials may cause a reaction generating heat or decomposition: water.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, aniline, oxides of nitrogen and other unidentified organic compounds in smoke.

Hazardous Polymerization:

Will not occur

~~~~ SECTION 11 ~~~~ TOXICOLOGICAL INFORMATION ~~~~

*Data is for individual components of preparation.

Materials having a known chronic/accute effects on eyes:

Eye irritation-irritating

Materials having a known dermal toxicity.

Rabbit, dermal LD50->5,000mg/kg.

Practically nontoxic

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Skin irritation-irritating.

Materials having a known oral toxicity.Rat, oral LD50-10,000 mg/kg.
Materials having a known Inhalation hazard:

Identified Carcinogens:

Results from a lifetime inhalation study in rats indicate that MDI aerosol was carcinogenic at 6mg/m³, the highest dose tested. This is well above the recommended TLV of 5ppb (0.05 mg/m³). Only irritation was noted at the lower concentration of 0.2 and 1 mg/m³. As a result of previous repeated over exposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapor-only exposure.

Identified Teratogens:

NO DATA

Identified Reproductive toxins :

NO DATA.

Identified Mutagens:

NO DATA.

~~~~ SECTION 12   ~~~~   ECOLOGICAL INFORMATION   ~~~~

**Ecotoxicological effects on plants and animals:**

DAPHNIA MAGNA, 24 HR LC50->5000 MG/L.

ZEBRA FISH, STATIC 24 HR LC50->500 MG/L.

**Chemical Fate :**

Immiscible with water, but will react with water to produce inert and non-biodegradable solids.

~~~~ SECTION 13   ~~~~   DISPOSAL CONSIDERATIONS   ~~~~

Instructions:

Dispose of unused product or contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

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Incineration is acceptable and the preferred method of disposal, however; nitrogen oxide emissions controls may be required to meet specifications. Chemical and biological degradation is possible. Empty containers will retain product residue and vapors and are subject to proper waste disposal, as above.

~~~~ SECTION 14 ~~~~ TRANSPORT INFORMATION ~~~~

Shipping Information:

DOT INFORMATION: 49CFR 172.101

DOT DESCRIPTION: NON HAZARDOUS FOR GROUND AND AIR TRANSPORT IN QUANTITIES < 793 GALLONS IN A SINGLE CONTAINER.

FOR SEA: ISOCYANATE SOLUTION, TOXIC, N.O.S. (CONTAINS MDI), 6.1, UN 2206, PG I.

~~~~ SECTION 15 ~~~~ REGULATORY INFORMATION ~~~~

(Not meant to be all inclusive-selected regulations represented)**US Regulations:****Status Of Substances Lists:**

The Concentrations Shown In Section II Are Maximum Ceiling Levels (Weight %) to be used for calculations for regulations.

A reportable quantity is a quantity of a hazardous substance that triggers reporting requirements under the Comprehensive Environmental Response Compensation And Liability Act (CERCLA).

If a spill of a substance exceeds it's reportable quantity (RQ) in CFR 302.3, Table 40 302.4 Appendix A & 302.4 Appendix B, the release must be reported to The National Response Center At (800) 424-8802, The State Emergency Response Commission (SERC), And community emergency coordinators likely to be affected.

Components present that could require reporting under the statute are:

SEE SECTION II FOR PERCENTAGES

*TOXIC: NOT REPORTABLE IN QUANTITIES LESS THAN 1%

#CARCINOGEN: NOT REPORTABLE IN QUANTITIES LESS THAN .1%

DIPHENYLMETHANE-4,4-DIISOCYANATE CAS #101-68-8 RQ 5000#.

Superfund Amendments And Reauthorization Act Of 1986 (SARA) Title III Requires emergency planning based on the Threshold Quantities (TPQ'S) and release reporting based on Reportable Quantities (RQ'S) In 40 CFR 355 Appendix A&B Extremely Hazardous Substances. The emergency planning and release requirements of 40 CFR 355 apply to any facility at which there is present any amount of any extremely hazardous substance (EHS) equal to or in excess of it's Threshold Planning Quantity (TPQ).

Components present that could require reporting under the statute are:

DIPHENYLMETHANE-4,4-DIISOCYANATE CAS #101-68-8 RQ 5000#.

1,3-BUTADIENE CAS #106-99-0 RQ 10#.

EPCRA 40 CFR 372 (Section 313) Requires EPA and the States to

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annually collect data on releases of certain toxic materials from industrial facilities, and make the data available to the public in the Toxics Release Inventory (TRI). This information must be included in all MSDS'S that are copied and distributed or compiled for this material. Reporting Threshold: Standard: A facility must report if it manufactures (including imports) or processes 25,000 pounds or more or otherwise uses 10,000 pounds or more of a listed toxic chemical during the calendar year.

Components present that could require reporting under the statute are:

See Section II

The components of this product are listed or excluded from listing on the US Toxic Substance Control Act (TSCA) chemical substance inventory. Mixtures shall be assumed to present the same health hazards as do the Components Which Comprise One Percent (By Weight Or Volume) or greater of the Mixture, except that the mixture shall be assumed to present carcinogenic hazard if it has a component in concentrations of 0.1 percent greater. For a list of hazardous ingredients:

See Section II

the remaining percentage of unspecified ingredients, if any, are not contained in above DeMinimis concentrations and/or are believed to be non-hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200), and may consist of pigments, fillers, defoamers, wetting agents, resins, dryers, anti-bacterial agents, water and/or solvents in varying concentrations.

International Regulations:

Canadian WHMIS:

CLASS D - POISONOUS AND INFECTIOUS MATERIALS
Division 2 Materials Causing Other Toxic Effects
Subdivision B - Toxic Materials

Canadian Environmental Protection Act (CEPA):

All of the components of this product are exempt or listed on the DSL. See Section II For Composition/Information on Ingredients

EINECS:

ON INVENTORY.

State Regulations:

California:

California Proposition 65: The following Statement is made in order to comply with The California Safe Drinking Water and Toxic Enforcement Act of 1986

"WARNING: This product contains the chemical(s) appearing below known to the State of California to:

A: Cause Cancer

CARBON BLACK, CAS#1333-86-4

*If tinted contains Carbon Black: CAS#1333-86-4 and may also contain trace amounts of Crystalline Silica: CAS#14-808-60-7

B: Cause Birth Defects or other Reproductive Harm :

PRESENT AT GREATER THAN OR EQUAL TO 0.1% SEE SECTION II

In addition to the above named chemical(s) (if any), this product may contain trace amounts of chemicals, known to the State of California, to cause Cancer or Birth Defects and other Reproductive Harm

Delaware:

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Florida:**Massachusetts:****Michigan:****Minnesota:****New Jersey:**

CATEGORY #: N120 CATEGORY NAME: Diisocyanates3

TPQ: 100 #

CAS# 101-68-8 Methylenebis(phenylisocyanate)4

NJ SUB NO: 3757TPQ: 100

New York:**Pennsylvania:**

DIPHENYLMETHANE DIISOCYANATE HOMOPOLYMER

CAS # 101-68-8 HAZ.SUBSTANCE CODE:E

Washington:

~~~~ SECTION 16 ~~~~ OTHER INFORMATION ~~~~

HMIS® III**Health : 3****Flammability : 1****Physical Hazard : 1**

*Following Health rating Indicates Chronic/Carcinogenic Effects

HMIS® III Personal Protection : K

This rating is for the product as it is packaged. This rating will need to be adjusted by the user based on conditions of use.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them & determine the suitability & completeness of information from all sources to assure proper use & disposal of these materials & the safety & health of employees & customers