

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Epic Gloss – Part A
GENERAL USE: Polymeric Resin
PRODUCT DESCRIPTION: Water Reducible Polyol

DATE PREPARED: 01-01-13
SUPERCEDES: 07-01-09

MANUFACTURER’S NAME: Ultra Durable Floors
ADDRESS: 1415 5th Street North, St. Cloud, MN 56303, USA
PHONE: 320-258-2266
EMERGENCY CONTACT: 320-492-1307 or 612-919-6075

DISTRIBUTOR’S NAME: Same
ADDRESS:
PHONE:
EMERGENCY CONTACT:

SECTION 2 – HAZARDOUS INGREDIENTS

INGREDIENT:	1,4-Butanediol	Trimethylpropane monoallyl ether
CAS No.	110-63-4	682-11-1
% by WEIGHT:	4-6	3-7
OSHA PEL:	Not Established	Not Established
OSHA TWA:	Not Established	Not Established
ACGIH TWA:	Not Established	Not Established
ACGIH STEL:	Not Established	Not Established

SECTION 3 – HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

Polyol resin, amber liquid, contact may cause eye irritation and minor skin irritation. Ingestion may cause gastric distress. Will support combustion if involved in fire. Hazard symbol – none. Risk Phrases – not classified.

POTENTIAL HEALTH EFFECTS

INHALATION: None expected, however, certain individuals may be sensitized and experience minor nausea or headaches. Inhalation of airborne mist could be damaging to the lungs.

SKIN: None expected, however, prolonged contact may cause irritation.

EYES: Contact with the eyes will cause irritation.

INGESTION: May cause gastric distress, vomiting and diarrhea. Any material aspirated during vomiting may cause lung injury.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 4 – FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; if symptoms persist seek medical attention.

SKIN: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists seek medical attention.

EYES: Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists seek medical attention.

INGESTION: Give two glasses of water for dilution; DO NOT induce vomiting; seek medical attention; never give anything by mouth to an unconscious person.

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: Non-flammable
 METHOD USED: Not applicable
 FLAMMABLE LIMITS: LFL: Not applicable UFL: Not applicable
 Auto-Ignition Temp: Not determined NFPA Class: None

GENERAL HAZARDS: Product may be irritating to skin, eyes and respiratory tract. Products of combustion include compounds of carbon, hydrogen, nitrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES: Keep containers cool with water spray to prevent container rupture due to steam buildup; contact with material may cause irritation to skin, eyes and respiratory tract.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS COMBUSTION PRODUCTS: Smoke, fumes, oxides of carbon and nitrogen

SECTION 6 – ENVIRONMENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Shut off source of leak if safe to do so. Dike and contain product. Confine spill, soak up with clay, sand or other approved absorbent, shovel product into approved container for disposal. Wash area with plenty of water.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep containers closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: The use of local exhaust ventilation is recommended. No other special controls are indicated.

PERSONAL PROTECTION

RESPIRATORY PROTECTION: None required, however, if misting occurs, NIOSH approved respirator capable of removing particulate from air must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Recommended for general protection.

EYE PROTECTION: Safety goggles with side shields

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (MM Hg):	17 mmHg @ 20° C	pH:	8.5
VAPOR DENSITY (AIR = 1):	> 1	APPEARANCE AND ODOR:	Amber liquid, slightly sweet odor
SPECIFIC GRAVITY (WATER = 1):	1.080	BOILING POINT:	212° F (100° C)
EVAPORATION RATE (WATER = 1):	< 1	PHYSICAL STATE:	Liquid
SOLUBILITY IN WATER:	Totally Miscible	VISCOSITY:	Not specified
FREEZING POINT:	Not determined	VOLATILE ORGANIC COMPOUNDS:	<10 grams / liter

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions
 CONDITIONS TO AVOID: Extreme temperatures

INCOMPABILITY (MATERIALS TO AVOID): Can react vigorously with strong oxidizers, strong acids, mineral and organic bases, primary and secondary aliphatic amines.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, nitrogen, hydrocarbons, fumes and smoke may be produced.

HAZARDOUS POLYMERIZATION: May occur under abnormal conditions.
 CONDITIONS TO AVOID: Hazardous polymerization may occur with excess of aliphatic amine curing agent.

SECTION 11 – TOXICOLOGICAL INFORMATION

HAZARDOUS INGREDIENT:	1,4-Butanediol	Trimethylolpropane monoallyl ether
CAS #:	110-63-4	682-11-1
EINECS #:	203-786-5	211-662-7
LD50 of INGREDIENT:	1780 mg/kg	5000 mg/kg
(Species and Route):	Oral-rat	Oral-rat
LC50 of INGREDIENT:	15 mg/14 H	Not established
(Species and Route):	Oral-rat	

SECTION 12 – ECOLOGICAL INFORMATION

No data available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State and Federal Regulations. Product is classified as non-hazardous; however, non-hazardous materials may become hazardous waste upon contact with other products. Refer to “40 CFR Protection of Environment Parts 260-299” for complete waste disposal regulations. Consult your Local, State or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Not regulated
 HAZARD CLASS / PACK GROUP: Not regulated
 IATA HAZARD CLASS / PACK GROUP: Not regulated
 REFERENCE: Not applicable
 IMDG HAZARD CLASS: Not regulated
 IDENTIFICATION NUMBER: None
 RID/ADR DANGEROUS GOODS CODE: Not regulated
 LABEL: None Required
 CANADIAN TDG CLASS / DIVISION: Not regulated
 HAZARD SYMBOLS: None
 HAZARD IDENTIFICATION NUMBER (HIN): None

NOTE: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100-177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: None

313 Reportable Ingredients: None

CERCLA (Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Not Controlled.

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredients Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS number are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases: Not Classified

EC Safety Phrases: S24/25 Avoid contact with skin and eyes

SYMBOLS REQUIRED FOR LABEL: None

SECTION 16 – OTHER INFORMATION

No specific notes.

HMIS HAZARD RATINGS 0 = INSIGNIFICANT; 1 = SLIGHT; 2 = MODERATE; 3 = HIGH; 4 = EXTREME

HEALTH: 1

FLAMMABILITY: 0

PHYSICAL HAZARD: 0

PERSONAL PROTECTIVE EQUIPMENT: B (SAFETY GLASSES AND GLOVES)

REVISIONS SUMMARY

This MSDS has been revised in the following sections: No changes noted

The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to Ultra Durable Floors as described in Section 1.

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Epic – Part B
GENERAL USE: Aliphatic polyisocyanate curing agent
PRODUCT DESCRIPTION: Yellow liquid, practically odorless

DATE PREPARED: 01-01-13
SUPERCEDES: 07/01/09

MANUFACTURER'S NAME: Ultra Durable Floors
ADDRESS: 1415 5th Street North, St. Cloud, MN 56303, USA
PHONE: 320-258-2266
EMERGENCY CONTACT: 320-492-1307 or 612-919-6075

DISTRIBUTOR'S NAME: Same
ADDRESS:
PHONE:
EMERGENCY CONTACT:

SECTION 2 – HAZARDOUS INGREDIENTS

INGREDIENT:	Homopolymer of hexamethylene diisocyanate*	Hexamethylene diisocyanate (monomer) (a,b,c)
CAS No.	28182-81-2	822-06-0
% by WEIGHT:	100	3-7
OSHA PEL:	Not Established	Not Established
OSHA TWA:	0.5 TWA	0.005
ACGIH TWA:	Not Established	Not Established
ACGIH STEL:	0.5 STEL	0.005

(*) The ACGIH Threshold Limit Value (TLV) has not been established nor has OSHA established the Permissible Exposure Limit (PEL) for this product, therefore the limits described have been established as guidelines by the manufacturer.

(a) Monomer content is less than 0.2% based on resin solids at the time of manufacture

(b) A "yes" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

(c) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture > 24,000 lbs) or greater amounts, according to 40 CFR 302.

SECTION 3 – HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

Yellow liquid, nearly odorless. May cause eye, skin and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled or swallowed. May cause lung damage. As a result of previous overexposures by inhalation, or a single large dose, certain individuals may develop isocyanate sensitization which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Prolonged skin contact can cause skin sensitization. Individuals who have developed skin sensitization can develop symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Toxic gases are emitted during burning or thermal decomposition. Hazard symbol for this product – Xi. Risk Phrases – R 36/27/38, 42/43.

POTENTIAL HEALTH EFFECTS

INHALATION: High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise. Chronic overexposures, or a single large dose, may cause isocyanate sensitization and subsequent reaction to a later exposure to isocyanate at levels well below the TLV.

SKIN: Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis. Chronic exposure may result in skin sensitization, which can cause symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Cured material is hard to remove.

EYES: Contact causes severe irritation and pain associated with redness and swelling of the conjunctiva.

INGESTION: Moderately toxic; may cause headache, dizziness, diarrhea and general weakness; large doses may result in red blood cell hemolysis.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

MATERIAL SAFETY DATA SHEET

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Epic – Part B

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (MM Hg):	> 0.01 mmHg @ 20° C	pH:	Not applicable
VAPOR DENSITY (AIR = 1):	Not determined	APPEARANCE AND ODOR:	Yellow liquid, practically odorless
SPECIFIC GRAVITY (WATER = 1):	1.160	BOILING POINT:	Not measured
EVAPORATION RATE (WATER = 1):	Not volatile	PHYSICAL STATE:	Liquid
SOLUBILITY IN WATER:	Insoluble	VISCOSITY:	Approx. 3500 mPa's @ 74°F
FREEZING POINT:	Not determined	VOLATILE ORGANIC COMPOUNDS:	None

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

CONDITIONS TO AVOID: Extreme temperatures, open flames

INCOMPABILITY (MATERIALS TO AVOID): Strong oxidizers, water, amines

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon and nitrogen, HCN, HDI, hydrocarbons, fumes and smoke may be produced.

HAZARDOUS POLYMERIZATION: May occur under abnormal conditions.

CONDITIONS TO AVOID: Contact with moisture may cause polymerization

SECTION 11 – TOXICOLOGICAL INFORMATION

HAZARDOUS INGREDIENT:	Homopolymer of hexamethylene diisocyanate*	Hexamethylene diisocyanate (monomer) (a,b,c)
CAS #:	28182-81-2	882-06-0
EINECS #:	Not found	212-485-8
LD50 of INGREDIENT:	>10,000 mg/kg	710 mg/kg
(Species and Route):	Oral-rat	Oral-rat
LC50 of INGREDIENT:	137-1150 mg / m3 / 4H	275 mg / m3
(Species and Route):	Oral-rat	Inhalation-rat

SECTION 12 – ECOLOGICAL INFORMATION

No data available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State and Federal Regulations. This product may produce concentrated hazardous vapors or fumes in a disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260-299" for complete waste disposal regulations for ignitable materials. Consult your Local, State or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

SECTION 14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS / PACK GROUP: None/None
IATA HAZARD CLASS / PACK GROUP: None
REFERENCE: Not applicable
IMDG HAZARD CLASS: None
IDENTIFICATION NUMBER: None
RID/ADR DANGEROUS GOODS CODE: None
LABEL: None Required
CANADIAN TDG CLASS / DIVISION: None
HAZARD SYMBOLS: None
HAZARD IDENTIFICATION NUMBER (HIN): None

NOTE: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100-177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

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All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Acute health, eye and skin irritant
313 Reportable Ingredients: None

CERCLA (Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
WHMIS Classification: Not Controlled.

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Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS number are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases: R36/37/38 Irritating to eyes, respiratory system and skin, R42/43 May cause sensitization by inhalation and skin contact

EC Safety Phrases: S23 Do not breathe vapor, S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S36/27/39 Wear suitable protective clothing, gloves and eye/face protection, S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible)

SYMBOLS REQUIRED FOR LABEL: Irritant



SECTION 16 – OTHER INFORMATION

No specific notes.

HMIS HAZARD RATINGS * = chronic health hazard; 0 = INSIGNIFICANT; 1 = SLIGHT; 2 = MODERATE; 3 = HIGH; 4 = EXTREME

HEALTH: 2*

FLAMMABILITY: 1

PHYSICAL HAZARD: 0

PERSONAL PROTECTIVE EQUIPMENT: B (SAFETY GLASSES AND GLOVES)

REVISIONS SUMMARY

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