

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name. UE polyaspartic UPA-405B / 205B (Part B)

1.2 Recommended use and restriction on use Concrete floor top coat

General use Do not use except to purpose
Restriction on Use

1.3 Details of the supplier of the safety data sheet

Ultra epoxy, Corp
1201 Ave H, Grand Prairie, TX 75050
214-753-4423

1.4 Emergency telephone number

214-753-4423

SECTION 2: Hazards identification

2.1 GHS classification

Emergency Overview: CAUTION. Contains hexamethylene diisocyanate (HDI) (CAS NO. 822-06-0). Inhalation of HDI mists or vapors may cause respiratory irritation, breathlessness, chest discomfort, and reduced pulmonary function. Overexposure well above the OSHA PEL may result in bronchitis, bronchial spasms, and pulmonary edema.

Long-term exposure to HDI has been reported to cause lung damage, including reduced lung function which may be permanent. Acute or chronic overexposure to HDI may cause sensitization in some individuals resulting in allergic respiratory reactions including wheezing, shortness of breath, and difficulty to breathing.

Acute Tox. 4 (Inhalation - mist) Acute toxicity

Resp. Sens. 1 Respiratory sensitization

Skin Sens. 1 Skin sensitization

STOT SE 3 (irritating to respiratory system) Specific target organ toxicity – single exposure

2.2 Label elements

GHS label elements, including
precautionary statements
Hazard symbols

:



Signal words
Hazard statements

Danger

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements

Prevent	P280 Wear protective gloves. P271 Use only outdoors or in a well-ventilated area. P260 Do not breathe mist or vapor. P261 Avoid breathing mist. P284 In case of inadequate ventilation wear respiratory protection. P272 Contaminated work clothing should not be allowed out of the workplace.
Response	P312 Call a POISON CENTER or doctor/physician if you feel unwell. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water. P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician. P362 + P364 Take off contaminated clothing and wash before reuse.
Storage	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Disposal	P501 Dispose of contents/container to hazardous or special waste collection point.

General Information: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

SECTION 3: Composition/information on ingredients

Chemical name	CAS No	Content (%)
Homopolymer of hexamethylene diisocyanate	28182-81-2	Trade Secret
Hexamethylene diisocyanate	822-06-0	Trade Secret

SECTION 4: First aid measures

General advice: Seek medical advice or medical attention if condition persists.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes.

Skin Contact: Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

Ingestion: Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. Do not induce vomiting.

Inhalation: Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Note to physician: No specific treatment. Treat symptomatically. Call the poison control center immediately if large quantities have been ingested.

SECTION 5: Firefighting measures

Suitable Fire Extinguishing Media: Carbon dioxide (CO₂), Foam, Dry chemical.
Flammable Limits: Not available.
Explosion Limits: Not Available
Auto-Ignition Temperature: 805°F (430°C)
Flash Points: Open Cup: 437°F (225°C), Closed Cup: 338°F (170°C)

SECTION 6: Accidental release measures

Personal Precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform authorities if the product has caused environmental pollution (sewers, drains, waterways or soil).

Methods for Cleaning up: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: Handling and storage

Handling: Put on appropriate personal protective equipment, PPE (see Section 8). Eating and drinking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated PPE or clothing, wash hands and face before eating and drinking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Use only in area provided with appropriate exhaust ventilation. Empty containers retain product residue and can be hazardous. Do not get in eyes, skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment.

Storage: Store between 15-27 °C (60-80 °F) in accordance with local regulations away from sources of heat, ignition, and direct sunlight. Store in original container. Keep in a dry, well-ventilated area, and away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination.

Special Handling: If bulging of drum occurs, transfer to ventilated cool area or outside away from people, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

SECTION 8: Exposure controls/personal protection

Component	CAS	General Exposure Limits	General Exposure Limits
Aliphatic polyisocyanate	28182-81-2	TWA 0.5 mg/m ³	STEL 1.0 mg/m ³ (15-min)
Hexamethylene diisocyanate (<0.5%)	822-06-0	ACGIH TWA 0.005 ppm	CLV 0.02 ppm

Engineering Measures: Work in well ventilated area. Provide natural air movement or fan to ensure adequate ventilation, especially in confined area. Avoid contact with skin, eyes, and clothing.

Environmental Exposure Controls: Construct a dike to prevent spreading. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment:

Respiratory - In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye - Splash proof safety glasses.

Skin - Rubber or plastic apron. Rubber or plastic gloves. Long sleeved clothing or wear protective sleeves. Remove and wash contaminated clothing before re-use

Other protective equipment information - Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Neoprene gloves. PVC disposable gloves. Nitrile rubber. Butyl rubber. Impervious gloves. (The breakthrough time of the selected glove(s) must be greater than the intended use period.)

SECTION 9: Physical and chemical properties

Form:	Liquid
Odor:	Mild
Color:	Clear, Pale Yellow
PH Value:	Not Applicable
Boiling Point:	>150°C (>302°F)
Melting Point:	Not Determined
Vapor Pressure:	4.7x10 ⁻⁷ mmHg @ 21°C (70°F)
Vapor Density:	Not Determined
Density (Nominal):	>1.0 g/cm ³ @ 70°F
Solubility in water:	Reacts with water
Evaporation Rate (Butyl Acetate = 1):	Not Applicable
Volatile Organic Compounds:	Nil

SECTION 10: Stability and reactivity

Chemical stability: Stable under normal conditions.

Conditions to avoid: Moisture. Excessive heat.

Materials to avoid: Water, alcohols, amines, strong bases, substances/products that react with isocyanates.

Hazardous decomposition products: Carbon dioxide. Carbon monoxide. Hydrogen cyanide. Nitrogen oxides. Aromatic isocyanates. Gases/vapors.

Hazardous polymerization: Under normal conditions hazardous polymerization will not occur.

SECTION 11: Toxicological information

Acute toxicity:

Oral - LD50/rat: >5000 mg/kg

Sensitization - Guinea pig: sensitizing

Inhalation Sensitization - Guinea pig: No

SECTION 12: Ecological information

Ecotoxicity effects:

Biodegradability - 28 days, 13% not readily biodegradable

Acute Fish Toxicity - 96 hr, LC50/Zebra Fish: 66 mg/l

Aquatic Invertebrates - 48 hr, EC50/Daphnia Magna: 88 mg/l

Plants -72 hr EC50/Scenedesmus Subspicatus: 113 mg/l

Harmful to aquatic organisms. May cause long term damage to environment.

SECTION 13: Disposal considerations

Waste Disposal: Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste-handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

A. UN number	Not dangerous goods
B. UN Proper shipping name	Not dangerous goods
C. Transport hazard class	Not dangerous goods
D. Packing group	Not dangerous goods
E. Environmental hazards	Not dangerous goods
F. Specific precautions for user related transport	No special precautions or requirements for transport
In case of fire emergency	
Emergency spill	

SECTION 15: Regulatory information

A. National and/or international regulatory information

OSHA: This product is considered to be a hazardous chemical under 29 CFR 1910.1200.

RCRA - Not a hazardous waste.

Clean Air Act Section 112 - Hexamethylene Diisocyanate 822-06-0.

SARA Section 311 AND 312 - This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: ACUTE, CHRONIC

SARA Section 313 - This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None.

SECTION 16: Other information

A. The source of data

The information contained herein is believed to be accurate.

It is provided independently of any sale of the product for purpose of hazard communication.

It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. - This Safety Data Sheet was compiled with data and information from the following sources: OSHA, NITE, ESIS, NLM, SIDS, IPCS