

## 1. IDENTIFICATION

**Product identifier**

**Product Name** UltraSpartic 85-EXT Part B

**Other means of identification**

**Part Number(s)** 233211, 233221, 233231

**Recommended use of the chemical and restrictions on use**

**Recommended use** Industrial use  
**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

ULTRA DURABLE TECHNOLOGIES  
 355 6<sup>th</sup> Ave. North  
 Waite Park, MN 56387  
 320-258-2266

**Emergency telephone number**

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

Flammable liquids	Category 4
Respiratory sensitization	Category 1
Skin sensitization	Category 1

**Danger**



**Hazard statements**

Combustible liquid  
 May cause an allergic skin reaction  
 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

**Precautionary Statements****Prevention:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 In case of inadequate ventilation wear respiratory protection.

**Response:**

If on skin: Wash with plenty of water.  
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 Specific treatment (see supplemental first aid instruction on this label).  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If experiencing respiratory symptoms: Call a poison center or doctor.  
 Wash contaminated clothing before reuse.  
 In case of fire: Use media other than water to extinguish.

**Storage:**

Store in a well-ventilated place. Keep cool.

**Disposal:**

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

**Other hazards which do not result in classification**

No additional information available

**Unknown acute toxicity (GHS US)**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

Not applicable

**3.2. Mixtures**

Name	Product identifier	%	GHS US classification
Hexamethylene diisocyanate homopolymer	CAS-No.: 28182-81-2	70 – 100	Skin Sens. 1, H317
Hexane, 1,6-diisocyanate	CAS-No.: 822-06-0	< 1	Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Not determined.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible liquid.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate area. Eliminate all ignition sources if safe to do so. Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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Other information : Dispose of materials or solid residues at an authorized site.

**6.4. Reference to other sections**

For further information refer to section 13.

## 7. HANDLING AND STORAGE

**7.1. Precautions for safe handling**

Precautions for safe handling

: Ensure good ventilation of the workstation. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures

: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink, or smoke when using this product. Always wash hands after handling the product.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions

: Store in a well-ventilated place. Keep cool.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

<b>UltraSpartic 85 EXT part B</b>	
No additional information available	
<b>Hexamethylene diisocyanate homopolymer (28182-81-2)</b>	
No additional information available	
<b>Hexane, 1,6-diisocyanate (822-06-0)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	0.005 ppm
<b>USA - ACGIH - Biological Exposure Indices</b>	
BEI (BLV)	15 µg/g Kreatinin Parameter: 1,6-Hexamethylenediamine with hydrolysis - Medium: urine - Sampling time: end of shift (nonspecific)
<b>Propane, oxybis(methoxy- (111109-77-4)</b>	
No additional information available	

**8.2. Appropriate engineering controls**

Appropriate engineering controls

: Ensure good ventilation of the work station.

Environmental exposure controls

: Avoid release to the environment.

**8.3. Individual protection measures/Personal protective equipment****Hand protection:**

Protective gloves

**Eye protection:**

Safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Colorless
Odor	: Slight
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 66 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.05
Density	: 8.8 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 75.867 mm <sup>2</sup> /s
Viscosity, dynamic	: 80 cP
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
	Auto-ignition temperature : No data available

### 9.2. Other information

No additional information available

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces.  
Heat. No flames, no sparks.  
Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

<b>Hexamethylene diisocyanate homopolymer (28182-81-2)</b>	
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	18500 mg/m <sup>3</sup> (Exposure time: 1 h)
ATE US (vapors)	18.5 mg/l/4h
ATE US (dust, mist)	18.5 mg/l/4h
<b>Hexane, 1,6-diisocyanato- (822-06-0)</b>	
LD50 oral rat	738 mg/kg
LD50 dermal rat	> 7000 mg/kg
LC50 Inhalation - Rat	0.06 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.

<b>Hexane, 1,6-diisocyanato- (822-06-0)</b>	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: 75.867 mm <sup>2</sup> /s
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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<b>Hexane, 1,6-diisocyanato- (822-06-0)</b>	
LC50 - Fish [1]	26.1 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## 14. TRANSPORT INFORMATION

In accordance with DOT / IMDG / IATA

### 14.1. UN number

DOT NA No : NA1993  
 UN-No. (IMDG) : Not applicable  
 UN-No. (IATA) : Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Combustible liquid, n.o.s. (Glycol ether)  
 Proper Shipping Name (TDG) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable

### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : Combustible liquid

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable

#### IATA

Transport hazard class(es) (IATA) : Not applicable

### 14.4. Packing group

Packing group (DOT) : III  
 Packing group (IMDG) : Not applicable  
 Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### DOT

UN-No.(DOT) : NA1993  
 DOT Special Provisions (49 CFR 172.102) : 148 - Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons).  
 IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2).  
 Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
 T1 - 1.5 178.274(d)(2) Normal 178.275(d)(2)  
 TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

**IMDG**  
No data available

**IATA**  
No data available

<b>15. REGULATORY INFORMATION</b>
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**15.1. US Federal regulations**

<b>UltraSpartic 85 EXT Part B</b>	
<b>SARA Section 311/312 Hazard Classes</b>	<b>Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Respiratory or skin sensitization</b>

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) 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.

<b>Hexane, 1,6-diisocyanato- (822-06-0)</b>	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

**15.2. International regulations**

<b>Hexamethylene diisocyanate homopolymer (28182-81-2)</b>	
Listed on TECI (Thailand Existing Chemicals Inventory)	

<b>Hexane, 1,6-diisocyanato- (822-06-0)</b>	
Listed on TECI (Thailand Existing Chemicals Inventory)	

**15.3. US State regulations**

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Hexane, 1,6-diisocyanate (822-06-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Massachusetts - Right To Know List



**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

Preparation Date	27-Jun-2023
Revision Date	28-Jan-2024
Revision Note	General formatting updates

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet