Safety Data Sheet

Issue Date: 22-Jan-2025 **Revision Date:** 22-Jan-2025 **Version 1**

1. IDENTIFICATION

Product identifier

Product Name UNI-8500 A

Other means of identification

SDS # UNI-007

Recommended use of the chemical and restrictions on use

Recommended Use Polyurea coating.

Details of the supplier of the safety data sheet

Supplier Address
THIS SAFETY DATA SHEET
IS NOT COMPLIANT UNLESS
U.S. ADDRESS IS USED

Emergency telephone number

Emergency Telephone INSERT PHONE NUMBER(S)

2. HAZARDS IDENTIFICATION

Appearance: Clear liquid **Physical state:** Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 1B

Signal Word
Danger

Hazard statements
Harmful if inhaled
Causes serious eye irritation
May cause an allergic skin reaction
May cause cancer



Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of water and soap
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate; (Aspartic Acid Ester)	136210-30-5	30-40
1,1'-Methylenebis[(3-methylcyclohexyl-4)-2-amino-butanedioic acid], tetraethyl ester	136210-32-7	30-40
Propylene carbonate	108-32-7	5-8
Light aromatic petroleum naphtha	64742-95-6	8-12
1,2,4 Trimethylbenzene	95-63-6	2-4
Xylene	1330-20-7	0-1
Cumene	98-82-8	0-1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	May be harmful in contact with skin. Causes mild skin irritation. Harmful if inhaled. Causes serious eye irritation. May cause an allergic skin reaction. May cause cancer.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
In case of fire: water fog, foam, dry chemical powder, carbon dioxide (CO2).

Unsuitable Extinguishing Media	Do not use water jet as it might spread flame.

Specific Hazards Arising from the Chemical
During fire, nitrous gases, fumes/smoke, isocyanates and vapor may be formed.

Hazardous combustion products Combustion products may include: acidic hydrogen chloride & hydrogen fluoride, carbon oxide, hydrocarbons, nitrogen oxides and smoke.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	As a general precaution, take personal precaution not to breath gas, vapors, or dusts. Do not get in eyes, on skin or clothing. Use appropriate personal protection equipment. In the event of an emergency, evacuate any unnecessary personnel.

Environmental precautions

Environmental precautions	As an environmental precaution, prevent spillage to sewers, public waters, and do not penetrate ground/soil. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up For containment, ensure adequate ventilation and absorb any spill with inert liquid binding material and dispose of waste safely.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Incompatible Materials Water, amines, substances that react to polyureas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,2,4 Trimethylbenzene 95-63-6	TWA: 10 ppm	-	TWA: 25 ppm TWA: 125 mg/m^3
Cumene 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m^3 (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m^3 (vacated) S* S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m^3
Xylene 1330-20-7	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m^3 (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m^3 (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m^3	-

Appropriate engineering controls

Engineering Controls Local exhaust ventilation required. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Provide sufficient ventilation to keep vapors below permissible exposure limit. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Use tightly sealed goggles or safety glasses with side shields which are resistant to Chemicals. Refer to 29 CFR 1910.133 for eye and face protection regulations.
Skin and Body Protection	Wear chemical resistant protection gloves. Wear impervious clothing as necessary to protect against coming in contact with product. Refer to 29 CFR 1910.138 for appropriate skin and body protection.
Respiratory Protection	If insufficient ventilation, wear respiratory protection. Refer to 29 CFR 1910.134 for respiratory protection requirements.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Clear liquid	**Odor**	Not determined
Color	Colorless	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
pH	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	140 °C / 284 °F	
Flash point	106 °C / 222.8 °F	
Evaporation Rate	Not determined	

Flammability (Solid, Gas)	Not determined
Flammability Limit in Air	
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor Pressure	Not determined
Vapor Density	No data available
Relative Density	1.05-1.10
Water Solubility	Insoluble in water
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	No data available
Decomposition temperature	Not determined
Kinematic viscosity	Not determined

Dynamic Viscosity Not determined

Explosive Properties Not determined
Oxidizing Properties Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction.

Conditions to Avoid
Keep away from heat, sparks and open flame. Avoid high temperatures. Avoid contact with incompatible materials.

Incompatible materials
Water, amines, substances that react to polyureas.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact May be harmful in contact with skin.

Inhalation Harmful if inhaled.

Ingestion Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene carbonate 108-32-7	= 29000 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Light aromatic petroleum naphtha	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h

64742-95-6			
1,2,4 Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m^3 (Rat) 4 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes mild skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Sensitization May cause an allergic skin reaction.

Carcinogenicity May cause cancer.

Chemical name	ACGIH	IARC	NTP	OSHA
Cumene 98-82-8	A3	Group 2B	Reasonably Anticipated	X
Xylene 1330-20-7		Group 3		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 IARC components are "not classifiable as human carcinogens"
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 6,381.00 mg/kg
Dermal LD50 2,461.90 mg/kg
ATEmix (inhalation-dust/mist) 1.50 mg/l
ATEmix (inhalation-vapor) 21.50 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Light aromatic petroleum naphtha 64742-95-6		LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	EC50: =6.14mg/L (48h, Daphnia magna)
Propylene carbonate 108-32-7	EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: >1000mg/L (96h, Cyprinus carpio)	EC50: >500mg/L (48h, Daphnia magna)
1,2,4 Trimethylbenzene 95-63-6		LC50: 7.19 - 8.28mg/L (96h, Pimephales promelas)	EC50: =6.14mg/L (48h, Daphnia magna)
Cumene 98-82-8	EC50: =2.6mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 6.04 - 6.61mg/L (96h, Pimephales promelas) LC50: =4.8mg/L (96h, Oncorhynchus mykiss) LC50: =2.7mg/L (96h, Oncorhynchus mykiss) LC50: =5.1mg/L (96h, Poecilia reticulata)	EC50: =0.6mg/L (48h, Daphnia magna) EC50: 7.9 - 14.1mg/L (48h, Daphnia magna)
Xylene 1330-20-7		LC50: =13.4mg/L (96h, Pimephales promelas) LC50: 2.661 - 4.093mg/L (96h, Oncorhynchus mykiss) LC50: 13.5 - 17.3mg/L (96h, Oncorhynchus mykiss) LC50: 13.1 - 16.5mg/L (96h, Lepomis macrochirus) LC50: =19mg/L (96h, Lepomis macrochirus) LC50: 7.711 - 9.591mg/L (96h, Lepomis macrochirus) LC50: 23.53 - 29.97mg/L (96h, Pimephales promelas) LC50: =780mg/L (96h, Cyprinus carpio) LC50: >780mg/L (96h, Cyprinus carpio) LC50: 30.26 - 40.75mg/L (96h, Poecilia reticulata)	EC50: =3.82mg/L (48h, water flea) LC50: =0.6mg/L (48h, Gammarus lacustris)

Persistence/Degradability
Not determined.

Bioaccumulation
There is no data for this product.

Mobility

Chemical name	Partition coefficient
Propylene carbonate 108-32-7	0.48
1,2,4 Trimethylbenzene 95-63-6	3.63
Xylene 1330-20-7	3.15
Cumene 98-82-8	3.55

Other adverse effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Cumene 98-82-8				U055
Xylene 1330-20-7		Included in waste stream: F039		U239

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Xylene 1330-20-7	Toxic Ignitable
Cumene 98-82-8	Toxic Ignitable

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIIC
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspar	X	ACTIVE	X	X		X			X

tate; (Aspartic Acid Ester)									
1,1'-Methylenebis[(3-methylcyclohexyl-4)-2-amino-butanedioic acid], tetraethyl ester	X	ACTIVE	X	X		X			X
Light aromatic petroleum naphtha	X	ACTIVE	X	X		X	X	X	X
Propylene carbonate	X	ACTIVE	X	X	X	X	X	X	X
1,2,4 Trimethylbenzene	X	ACTIVE	X	X	X	X	X	X	X
Cumene	X	ACTIVE	X	X	X	X	X	X	X
Xylene	X	ACTIVE	X	X	X	X	X	X	X

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

AICS *- Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Cumene 98-82-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Xylene 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
1,2,4 Trimethylbenzene - 95-63-6	95-63-6	1-4	1.0
Cumene - 98-82-8	98-82-8	0-1	0.1
Xylene - 1330-20-7	1330-20-7	0-1	1.0

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylene	100 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65

Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
1,2,4 Trimethylbenzene 95-63-6	X	X	X
Cumene 98-82-8	X	X	X
Xylene 1330-20-7	X	X	X

16. OTHER INFORMATION

NFPA	**Health hazards**	**Flammability**	**Instability**	**Special hazards**
	-	-	-	-

HMIS	**Health hazards**	**Flammability**	**Physical hazards**	**Personal Protection**
	-	-	-	Not determined

Issue Date: 05-Dec-2023
Revision Date: 07-Dec-2023
Revision Note: New format

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.

End of Safety Data Sheet