SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Ultra1Plus™ Diesel Exhaust Fluid

1.1 Product identifier:

Product name: Diesel Exhaust Fluid
Product number: DI224241
Product form: Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:
Use of the substance/mixture: Cleaning of waste gases

1.3 Company Identification (Details of the supplier of the safety data sheet):

Ultrachem LLC
1444 Northwest 82 Ave.
Doral, FL. 33126 USA
Phone +1 (786) 953 - 6132
www.ultra1plus.com

U1Dynamics Manufacturing LLC
4468 Genoa-Red Bluff Rd.
Houston, TX. 77059 USA
Phone +1 (786) 953 - 6132

1.3 Transportation Emergency Response:
CHEMTREC: (800) 424-9300 or (703) 527-3887

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification: Not classified. Non-hazardous

2.2 Label elements:

GHS-US labelling

Signal word (GHS-US):	None
Hazard statements (GHS-US):	None
Precautionary statements (GHS-US):	None

2.3 Other hazards: No additional information available.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

The urea used in this product is high-purity automotive-grade urea as defined by ISO 22241.
The water used meets deionized water quality requirements specified in ISO 22241.

3.1 Substances: Not applicable

3.2 Mixtures:

Name	Product identifier	% by wt	GH-US classification
Water	(CAS-No) 7732-18-5	67.5	Not classified
urea	(CAS-No) 57-13-6	32.5	Not classified

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

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures:

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed:

Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed: No Additional information available.

SECTION 5 FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Sand.
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture:

Reactivity: No dangerous reactions known under normal conditions of use.

5.3 Special protective equipment and precautions for fire-fighters:

Firefighting instructions:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.
Protection during firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 ACCIDENTAL RELEASE MEASURES

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

General measures:	The EPA has no established reportable quantity for spills for this material, secondary containment is not specified.

6.1.1. For non-emergency personnel:

Emergency procedures:	Evacuate unnecessary personnel.

6.1.2. For emergency responders:

Protective equipment:	Equip cleanup crew with proper protection.
Emergency procedures:	Ventilate area.

6.2. Environmental precautions: Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up:

Methods for cleaning up:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. For minor spillages wash down with excess water. Mop up small spills.

6.4. Reference to other sections: See Heading 8. Exposure controls and personal protection.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling:

Precautions for safe handling:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities:

Storage conditions:	Keep only in the original container in a cool, well-ventilated place away from: Direct sunlight, Heat sources. Keep container closed when not in use.
Incompatible materials:	Strong acids. Strong bases.

7.3. Specific end use(s): No additional information available.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Urea (57-13-6)
Not applicable
Water (7732-18-5)
Not applicable

8.2. Appropriate engineering controls: No additional information available.

8.3. Individual protection measures/Personal protective equipment:

Personal protective equipment: Avoid all unnecessary exposure. Gloves. Protective goggles.
Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses
Respiratory protection: Wear an appropriate mask.



Other information: Do not eat, drink, or smoke during use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Color: Colorless
Physical State: Liquid
Odor: Characteristic ammonia odor
Odor Threshold: No data available
pH: 9 – 10
Relative evaporation rate (butylacetate=1): < 1
Freezing Point: -11 °C (12 ºF)
Boiling point: > 100 °C (212 ºF)
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor Pressure: No data available
Relative vapor density at 20 °C: 0.6 H2O, >1
Specific Gravity: 1.09
Solubility: Soluble in water. Water 100%
Log Pow: No data available
Log Know: No data available.
Viscosity, kinematics: No data available.
Viscosity, dynamic: No data available.
Explosive limits: No data available.
Explosive properties: No data available.
Oxidizing properties: No data available.

9.2. Other information: No additional information available.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity: No dangerous reactions known under normal conditions of use.
10.2. Chemical stability: Stable under normal conditions.
10.3. Possibility of hazardous reactions: Not established.
10.4. Conditions to avoid: Not established.
10.5. Incompatible materials: Strong acids. Strong bases. Oxidizing agents (peroxides, chromates, dichromates).
10.6. Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Fume.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity: Not classified

urea (57-13-6)	
LD50 oral rat	14300 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value).
ATE US (oral)	14300 mg/kg bodyweight

Skin corrosion/irritation:	Not classified pH: 9 - 10
Serious eye damage/irritation:	Not classified pH: 9 - 10
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified
Potential adverse human health effects and symptoms:	Based on available data, the classification criteria are not met.
Symptoms/effects:	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity:

urea (57-13-6)	
LC50 fish 1	> 6,810.00 mg/l (96 h, Leuciscus idus, Experimental value, Nominal concentration)
EC50 Daphnia 1	> 10,000.00 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration).

12.2. Persistence and degradability:

urea (57-13-6)	
Persistence and degradability	Readily biodegradable in water.
ThOD	0.27 g O2/g substance

12.3. Bioaccumulative potential:

urea (57-13-6)	
BCF fish 1	1.00 (72 h, Brachydanio rerio, Fresh water, Literature study)
Log Pow	< -1.73 (Experimental value, EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil:

urea (57-13-6)	
Mobility in soil	Not applicable
Log Pow	-1.43 - -1.19 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects:

Effect on the ozone layer: No additional information available
Other information: Avoid release to the environment.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

Product/Packaging disposal recommendations: As a non-hazardous liquid waste, it should be solidified with stabilizing agents such as sand, fly ash, or clay absorbent, so that no free liquid remains before disposal to an industrial waste landfill.

Ecology - waste materials: Avoid release to the environment.

SECTION 14 TRANSPORT INFORMATION

Department of Transportation (DOT): In accordance with DOT. Not regulated

Transportation of Dangerous Goods: Refer to current TDG Canada for further Canadian regulations.

ADR: Not regulated.

Transport by sea: In accordance with IMDG / IMO. Not regulated

Air transport: In accordance with IATA / ICAO. Not regulated

SECTION 15 REGULATORY INFORMATION

15.1. US Federal regulations: Manufactured in accordance with ISO 22241 (Parts 1–4)

Ultra1Plus Diesel Exhaust Fluid	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
CERCLA RQ	None. This material is not classified as hazardous under U.S. EPA regulations.
SARA Section 302 Threshold Planning Quantity (TPQ)	No extremely hazardous substances are in this product.
SARA Section 311/312 Hazard Classes	Urea. No hazards resulting from the material as supplied.

urea (57-13-6)	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed

water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations:

CANADA

Ultra1Plus DEF Diesel Exhaust Fluid	
WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015) and the SDS contains all the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS.

15.3. US State regulations: California Proposition 65 - This product does not contain any substance(s) known to the state of California to cause cancer, developmental toxicity and/or reproductive toxicity

SECTION 16 OTHER INFORMATION

Revision date: 10/20/2023

Full text of H-statements:

NFPA health hazard: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity: 0 - Material that in themselves are normally stable, even under fire conditions.



SDS GHS US (GHS HazCom 2012) OWI

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