



# SAFETY DATA SHEET

## Drexel DE-ZAUST™

### Section 1: Material Identification

**Product Name:** Drexel De-Zaust™

**GHS product identifier:** Urea aqueous solution

**Company:** Drexel Chemical Company  
1700 Channel Avenue  
Memphis, TN 38106

**Recommended use:** Diesel exhaust fluid

**Recommended restrictions:** None available

**Synonyms:** DEF

**Emergency Telephone Number:**

ChemTrec	Drexel Chemical Company
Tel: 1-800-424-9300	901-774-4370

### Section 2: Hazard Identification (As defined by the OSHA Hazard Communication Standard, 29)

**GHS classification:**

<b>Health hazards:</b>	Skin corrosion/irritation	Category 2
	Eye damage/irritation	Category 2B
	Acute toxicity	Category 4

**GHS label elements:**

**Signal word:** Warning



**Hazard statement:** Causes skin irritation.  
Causes eye irritation.  
Harmful if swallowed.

**Precautionary statement:**

**Prevention:**

Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear eye protection, face protection, protective clothing, and protective gloves.

**Response:**

If skin irritation occurs 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 OR CLOTHING:** Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.  
**IF SWALLOWED:** Rinse mouth. Call poison center or doctor/physician if you feel unwell.

**Storage:**

Store in a dry place. Store in close container.

**Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Specific hazards:**

If ingestion occurs, symptoms include sore throat, mouth and stomach irritation. Larger ingestion amounts beyond listed exposure limits may cause defects to the central nervous system.

**Section 3: Composition Information**

<u>Components</u>	<u>CAS No.</u>	<u>Percent</u>
Active Ingredients:		
Urea	57-13-6	32.5%
Water	7732-18-5	67.5%

**Section 4: First-Aid Measures**

**Eye Contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Call poison control center or doctor for treatment advice.

**Skin Contact:** Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.

**Inhalation:** Move person to fresh air; If not breathing call 911 and give artificial respiration. Call poison control center or doctor for treatment advice.

**Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Section 5: Fire Fighting Measures**

**Suitable extinguishing media:** Product is not flammable. Use appropriate media for surrounding fire.

**Specific hazards arising from the chemical:** None known

**Protective equipment and precautions for firefighters:** Assure self-contained breathing apparatus is worn. Fight fire from upwind. Prevent runoff if possible.

**NFPA: Health: Flammability: Reactivity:**  
1 0 0

(Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Insignificant)

## Section 6: Accidental Release Measures

### Personal Precautions:

- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not contaminate water.

**Methods for containment:** Stop the flow of material, if this is without risk. Collect and dispose of spillage as indicated in section 13. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up:** Pick up spills with absorbent material and place in suitable properly labeled containers.

## Section 7: Handling and Storage

### KEEP OUT OF REACH OF CHILDREN

**Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

**Storage:** Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

## Section 8: Exposure Controls / Personal Protection

**Occupational exposure limits:** TLV: 10 mg/m<sup>3</sup>

### Engineering controls:

Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

### Personal protective equipment:

**Eye/Face Protection:** Use chemical goggles

**Skin Protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber (“nitrile” or “NBR”) Polyvinyl chloride (“PVC” or “vinyl”).

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material.

## Section 9: Physical and Chemical Properties

<b>Physical state:</b>	Liquid
<b>Color:</b>	Colorless
<b>Form:</b>	Liquid
<b>Odor:</b>	None
<b>Odor threshold:</b>	Not available
<b>pH:</b>	7.5 – 9.5
<b>Melting/freezing point:</b>	Not available
<b>Boiling point:</b>	>212°F
<b>Flash point:</b>	> 200°F (Non-combustible)
<b>Evaporation rate:</b>	Not available
<b>Flammability:</b>	Non-flammable
<b>Flammability limits in air, lower:</b>	Not available
<b>Flammability limits in air, upper:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not available
<b>Relative density:</b>	1.09 g/ml
<b>Solubility:</b>	Complete in water
<b>Octanol/water coefficient:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not available

## Section 10: Stability and Reactivity

**Chemical stability/instability:** Stable at typical use temperatures.

**Conditions to avoid:** None known

**Incompatible materials:** Avoid contact with strong oxidizing agents such as chlorine (bleach), peroxides, chromates, nitric acid, perchlorates, concentrated oxygen or permanganates. Contact can generate heat, fires, explosions and release toxic fumes. In addition, urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride.

**Possibility of hazardous reactions:** Will not occur

**Hazardous decomposition products:** Oxides of carbon and nitrogen

## Section 11: Toxicological Information

### Toxicology data:

#### Components:

Urea (57-13-6)

#### Test results:

Acute oral LD50 (rat): 8471 mg/kg

Acute dermal LD50 (rabbit): 8200 mg/kg

**Routes of exposure:** Skin contact. Eye contact. Ingestion.

**Acute effects:** Mild skin irritation. Eye irritation. Harmful if swallowed.

**Sensitization:** No data available

**Chronic effects:** No data available

**Carcinogenicity:** No data available

**Mutagenicity:** Non-mutagenic for bacteria and/or yeast

**Reproductive effects:** No data available

**Tetragenicity:** No data available

**Epidemiology:** No data available

**Skin corrosion/irritation:** Causes mild skin irritation

**Eye damage/eye irritation:** Causes eye irritation

**Specific target organ toxicity - single exposure:** Not classified

**Specific target organ toxicity - repeated exposure:** Not classified

**Other information:** Not available

## Section 12: Ecological Information

### Ecotoxicological data:

#### Components:

Urea (57-13-6)

#### Test results:

LC50 Algae: No data available

EC50 Daphnia: No data available

LC50 Fish: No data available

**Persistence and degradability:** Not established

**Bioaccumulation:** Not established

**Mobility in soil:** Not available

**Other adverse effects:** Avoid release to open bodies of water.

## Section 13: Disposal Considerations

**Disposal methods:** Dispose of in accordance with label instructions and all applicable regulations.

**Contaminated packaging:** Dispose of in accordance with applicable federal, state and local regulations.

## Section 14: Transport Information

### In accordance with ICAO/IATA/DOT/TDG:

**UN number:** Not regulated

**UN proper shipping name:** Not regulated

**Transport hazard classes:** Not regulated

**Packing group:** Not regulated  
**Environmental hazards:** Not regulated  
**Transport in bulk:** Not regulated  
**Special precautions:** Not available  
**Freight description:** Diesel exhaust fluid, liquid, n.o.s.  
**ERG Guide No.:** 171

## Section 15: Regulatory Information

### International inventories:

**TSCA:** Complies  
**EINECS/ELINCS:** Complies  
**ENCS:** Complies  
**IECSC:** Complies  
**KECL:** Complies  
**PICCS:** Complies  
**AICS:** Complies

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312:

**Immediate (Acute) Health Hazard:** Yes  
**Delayed (Chronic) Health Hazard:** No  
**Fire Hazard:** No  
**Reactive Hazard:** No  
**Sudden Release of Pressure Hazard:** No

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313:

- This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS No.	% By Weight	SARA 313- Threshold values (%)
No components			

## Section 16: Other Information

*Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.*

Date Revised: January 25, 2018

Supersedes: October 13, 2015