

SEL EXHAUST FLUID MATERIAL SAFETY DATA SHEET



1. Product and Company Identification

Product Name TerraCair® Ultrapure Diesel Exhaust Fluid

CAS # Mixture

Product use Diesel Exhaust NOx Reducing Agent

Manufacturer Terra Industries Inc.

600 Fourth Street

Sioux City, Iowa 51101 US Phone: 800-265-6643

CHEMTREC 800-424-9300 **CANUTEC** 613-996-6666

LEGEND
HMIS/NFPA

Severe 4
Serious 3
Moderate 2
Slight 1
Minimal 0





2. Hazards Identification

Emergency Overview CAUTION

EYE AND SKIN IRRITANT.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes May cause irritation. **Skin** May cause irritation.

Inhalation May be harmful by inhalation. May cause respiratory tract irritation.

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Skin. Respiratory system.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and

vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS#	Percent
Water	7732-18-5	67.5
Urea	57-13-6	32.5

4. First Aid Measures

First aid procedures

Eye contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing.

Obtain medical attention if irritation persists.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if

irritation persists.

Inhalation If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical

attention. If breathing has stopped, trained personnel should administer CPR

immediately.

Ingestion Do not induce vomiting. Rinse mouth with water, then drink one or two glasses

of water. Obtain medical attention. Never give anything by mouth if victim is

unconscious, or is convulsing.

Notes to physician

Symptoms may be delayed.

General advice If you feel unwell, seek medical advice (show the label where possible). Ensure

> that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear impervious gloves and safety glasses. Keep out of

reach of children.

5. Fire Fighting Measures

Flammable properties

Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media Treat for surrounding material.

Unsuitable extinguishing

media

Not available

Protection of firefighters

Specific hazards arising from Not available

the chemical

Not available

Protective equipment

for firefighters

Firefighters should wear full protective clothing including self contained

breathing apparatus.

Hazardous combustion products

Explosion data

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.

Sensitivity to mechanical

impact

Not available

Sensitivity to static discharge

Not available

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Wear appropriate protective clothing.

Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers,

basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Small spills may be

absorbed with non-reactive absorbent and placed in suitable, covered,

labeled containers.

Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling

Use good industrial hygiene practices in handling this material.

Storage

Keep out of reach of children. Store in a closed container away from incompatible

materials.

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8. Exposure Controls / Personal Protection

Exposure limits Exposure Limits

Ingredient(s)

Urea

ACGIH-TLV

Not established

OSHA-PEL

Not established

Engineering controls Ensure adequate ventilation, especially in confined areas. Use only under good

ventilation conditions or with respiratory protection.

Personal protective equipment

Eye / face protectionWear safety glasses with side shields. **Hand protection**Impervious gloves. Nitrile, Viton, Butyl.

Skin and body protection

As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved

NIOSH respirator.

General hygiene considerations

Avoid breathing vapors. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks

and immediately after handling the product.

9. Physical & Chemical Properties

AppearanceClear.ColorColorlessFormLiquid

Odor Slight ammonia

Physical state

pH

9.8 - 10.0

Freezing point

-12°C

Boiling point

104°C

Density 9.1 lbs. / USG - 4.13 kg / 3.785L

Specific gravity 1.087-1.093 @ 20°C

Solubility (H2O) 100%

10. Chemical Stability & Reactivity Information

Chemical stabilityStable under recommended storage conditions.Conditions to avoidDo not mix with any other chemical or product.

Incompatible materials Acids. Oxidizers. Alkalis.

Hazardous decomposition products May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.

Possibility of hazardous reactions Hazardous polymerization does not occur.

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11. Toxicological Information

Component analysis - LC50

Ingredient(s) LC50

Urea Not available

Component analysis - Oral LD50

Ingredient(s) LD50

Urea 11,500 - 13,000 mg/kg mouse; 14,300 - 15,000 mg/kg rat; 510 mg/kg cattle.

Effects of acute exposure

EyeMay cause irritation.SkinMay cause irritation.

Inhalation Not available

Ingestion May cause stomach distress, nausea or vomiting.

Sensitization

Non-hazardous by WHMIS/OSHA criteria.

Chronic effects

Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity

Non-hazardous by WHMIS/OSHA criteria.

Mutagenicity

Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects

Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity

Non-hazardous by WHMIS/OSHA criteria.

12. Ecolological Information

Ecotoxicity Components of this product have been identified as having potential environmental

concerns.

Ecotoxicity - Freshwater Fish Species Data

Urea 57-13-6 96 Hr LC50 Barillius barna: >9100 mg/L

Ecotoxicity - Microtox Data

Urea 57-13-6 24HrEC50 Daphnia magna straus:>10000mg/L

Environmental effects Not available **Aquatic toxicity** Not available Persistence / degradability Not available **Bioaccumulation / accumulation** Not available **Partition coefficient** Not available Not available Mobility in environmental media **Chemical fate information** Not available Other adverse effects Not available

13. Disposal Considerations

Waste codes Not available

Disposal instructions Review federal, provincial, and local government requirements prior to disposal.

Waste from residues / unused

products Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations and the MSDS contains all the information required by the

Controlled Products Regulations.

US Federal regulationsThe product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous

chemical

res

No

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

Section 302 extremely hazardous substance

Section 311 hazardous

chemical Yes

Clean Air Act (CAA)

Clean Water Act (CWA)

Safe Drinking Water Act (SDWA)

Drug Enforcement Agency (DEA)

Not available

Not available

Food and Drug Administration

(FDA) Not available WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling



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State regulations This product does not contain a chemical known to the State of California to

cause cancer, birth defects or other reproductive harm.

Inventory name

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by Terra Industries Inc. 800-265-6643

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