



# Marine D.E.F. (DIESEL EXHAUST FLUID)

## Safety Data Sheet

Preparation Date: 6/12/2023

Version: 1

### SECTION 1: Identification

#### 1.1. Product identifier

Product name : D.E.F.(Diesel Exhaust Fluid)  
Product code : 1-85-1350

#### 1.2. Recommended use and restrictions on use

Recommended use : Solution for NO<sub>x</sub> reduction in SCR system  
Restriction on use : No data available

#### 1.3. Supplier

##### Manufacturer

CONSOLIDATED BIOFUELS LTD.  
7651 VANTAGE WAY  
V4G 1A6  
T 604-946-7626

#### 1.4. Emergency telephone number

Emergency number : Canutec 1-888-CAN-UTEC (226-8832) or Cellular: \*666

### SECTION 2: Hazard identification

#### 2.1. Classification of the mixture

##### Classification (GHS-CA)

Not classified

#### 2.2. GHS Label elements, including precautionary statements

Signal word (GHS-CA) : Not applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-CA)

No additional information available

### SECTION 3: Composition/information on ingredients

Name	Identifier	% By weight
Water	(CAS-No.) 7732-18-5	59 - 61
Urea	(CAS-No.) 57-13-6	39 - 41

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

Inhalation	:	If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If symptoms persist, get medical attention.
Skin contact	:	Wash with plenty of water. If skin irritation occurs: Get medical attention.
Eye contact	:	In case of contact with eyes, rinse immediately with plenty of water. If irritation develops, get medical attention.
Ingestion	:	Give plenty of water to drink. Do not induce vomiting. Get medical attention.

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

Symptoms/effects	:	None anticipated.
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### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	:	Unlikely to be required but, if necessary, treat symptomatically.
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## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media	:	Dry chemical, CO <sub>2</sub> , or water spray or regular foam.
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### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	:	Strong water jet.
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### 5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products	:	Carbon oxides (CO, CO <sub>2</sub> ). Toxic fumes may be released.
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### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting	:	Fire fighters should wear complete protective equipment.
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## SECTION 6: Accidental release measures

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

Personal precautions, protective equipment and procedures	:	Provide adequate ventilation. Put on appropriate personal protective equipment.
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### 6.2. Methods and materials for containment and cleaning up

For containment and cleaning up	:	Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.
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### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	:	Wear personal protective equipment. Ensure good ventilation of the work areas. Do not get in eyes, on skin.
Hygiene measures	:	Do not eat, drink, or smoke when using this product.

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

Storage conditions	:	Store in a well-ventilated place. Keep container tightly closed. Keep away from heat and flame.
Incompatible materials	:	Strong oxidizing agents. Strong acids. Strong bases.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

No data available

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation.  
Environmental exposure controls : Avoid release large quantities to the environment.

## 8.3. Individual protection measures/Personal protective equipment

### Hand protection:

Wear impervious gloves.

### Eye protection:

Wear protective glasses.

### Skin and body protection:

Skin contact should be prevented using suitable protective clothing, and footwear.

### Respiratory protection:

Normally no personal respiratory protection is necessary. If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator.

### General hygiene considerations:

Do not eat, drink or smoke when using this product. Wash hand before breaks and after handling the product.

## SECTION 9: Physical and chemical properties

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

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Colorless
Odour	:	Characteristic ammonia odor
Odour threshold	:	No data available
pH	:	9.5 -10
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	No data available
Freezing point	:	~ -11 °C
Boiling point	:	>100 °C
Flash point	:	No data available
Flammability limit in air	:	
Upper flammability limit	:	No data available
Lower flammability limit	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available

Vapour pressure	:	No data available
Vapour pressure at 50 °C	:	No data available
Specific gravity		1.08-1.09
Solubility	:	No data available
Viscosity	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Explosive limits	:	No data available

## 9.2. Other information

None :

## SECTION 10: Stability and reactivity

Reactivity	:	Non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Not established.
Incompatible materials	:	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous decomposition products	:	No hazardous decomposition products known at room temperature.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>Urea (57-13-6)</b>	
LD50/oral/rat	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

### 11.2. Other information

None

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>Urea (57-13-6)</b>	
LC50 fish	>6810 mg/l (Leuciscus idus, 96 h)
EC50 Daphnia	>10000 mg/l (Daphnia magna, static system, fresh water, 24h)

### 12.2. Persistence and degradability

Urea (57-13-6)	
Persistence and degradability	Readily biodegradable in water.
ThOD	0.27 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

Urea (57-13-6)	
Log Pow	<-1.73
Bio accumulative potential	Low penitential for bioaccumulation (BCF<500)

### 12.4. Mobility in soil

Urea (57-13-6)	
Log Koc	-1.43- -1.19
Mobility in soil	High mobile in soil

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

Regional legislation (waste) : If recycling is not practicable, disposal must be done according to official regulations. Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. Basic shipping description

In accordance with TDG: Not regulated.

### 14.2. Transport information/DOT

Not regulated

### 14.3. Air and sea transport

#### IMDG

Not regulated

#### IATA

Not regulated

## SECTION 15: Regulatory information

### 15.1. National regulations

Urea (57-13-6)	
Listed on the Canadian DSL (Domestic Substances List)	

### 15.2. International regulations

Urea (57-13-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

## SECTION 16: Other information

Date of issue : 6/12/2023

SDS Canada (GHS)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*