

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 04/21/2017

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture

Product name : BlueDEF Diesel Exhaust Fluid

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Solution for NOx reduction in SCR systems

#### 1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC 4065 Commercial Ave. Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com

## 1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)

Chemtrec

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Not classified

## 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

#### 2.4. Unknown acute toxicity (GHS US)

No data available

## SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Product identifier	% by wt	GHS-US classification
(CAS-No.) 7732-18-5	67.5	Not classified
(CAS-No.) 57-13-6	32.5	Not classified
	(CAS-No.) 7732-18-5	(CAS-No.) 7732-18-5 67.5

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

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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#### 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

No additional information available

#### 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 fire fighting 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 of 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

shioking and when leaving work. Frovide good vehiliation 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 products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

No additional information available

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## 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 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

Physical state : Liquid
Color : Colorless

Odor : characteristic ammonia odor

Odor threshold : No data available

pH : 9 - 10 Relative evaporation rate (butylacetate=1) : < 1

Freezing point : -11 °C (12 °F) Boiling point : > 100 °C (212 °F) Flash point : No data available : No data available Auto-ignition temperature : No data available Decomposition temperature Flammability (solid, gas) : No data available Vapor pressure : Not Applicable : 0.6 H2O, >1 Relative vapor density at 20 °C

Solubility : Soluble in water.

: 1.09

Water: 100 %
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Specific Gravity

No additional information available

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#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

No additional information available

## 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	8,471.00 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3,200.00 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 21,000.00 mg/kg (Rabbit; Literature study)
ATE US (oral)	8,471.00 mg/kg bodyweight

Skin corrosion/irritation : Not classified

pH: 9 - 10

Serious eye damage/irritation : Not classified

pH: 9 - 10

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (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.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

urea (57-13-6)	
LC50 fish 1	> 6,810.00 mg/l (LC50; 96 h; Leuciscus idus; Static system)
EC50 Daphnia 1	> 10,000.00 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 1	> 10000 mg/l (EC0; 168 h; Scenedesmus quadricauda; Static system; Fresh water)

## 12.2. Persistence and degradability

urea (57-13-6)	
Persistence and degradability	Inherently biodegradable. Hydrolysis in water. Highly mobile in soil.
ThOD	0.27 g O <sub>2</sub> /g substance

## 12.3. Bioaccumulative potential

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urea (57-13-6)		
BCF fish 1	1.00 (BCF; 72 h; Brachydanio rerio)	
BCF other aquatic organisms 1	11,700.00 (BCF)	
Log Pow	<-1.73 (Experimental value; EU Method A.8: Partition Coefficient)	
Bioaccumulative potential	Bioaccumulation: not applicable.	

#### 12.4. Mobility in soil

urea (57-13-6)	
Mobility in soil	Not applicable
Log Koc	Koc,0.037-0.064; Experimental value

## 12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on global warming : No known effects from this product.

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

Not regulated

#### Air transport

Not regulated

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

BlueDEF 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.		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		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard		

## water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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#### 15.2. International regulations

#### **CANADA**

BlueDEF 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 of the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS.

#### **EU-Regulations**

No additional information available

#### **National regulations**

## **BlueDEF Diesel Exhaust Fluid**

DSL (Canada): The intentional ingredients of this product are listed

#### urea (57-13-6)

DSL (Canada): The intentional ingredients of this product are listed EINECS (Europe): The intentional ingredients of this product are listed

#### 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**

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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant

irritation

NFPA fire hazard : 0 - Materials that will not burn under typical dire 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.

Hazard Rating
Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection B - Safety glasses, Gloves

SDS GHS US (GHS HazCom 2012) OWI

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