

# EnBlue™



An introduction to

# EnBlue

The liquid solution  
to reducing  
diesel emissions

Distributed by :



**POLY DYNAMIC ENGINEERING**  
(Company No: 003351429-U)

# EnBlue™



At **POLY DYNAMIC ENGINEERING** we provide low-volume and bulk deliveries of **EnBlue**, the chemical solution that makes diesel a more environmentally-friendly fuel option.



An example of an **EnBlue** tank on a fuel tanker.

Distributed by :



**POLY DYNAMIC ENGINEERING**  
(Company No: 003351429-U)

## ELIMINATE HARMFUL EMISSIONS FROM HEAVY VEHICLES

**POLY DYNAMIC ENGINEERING** is an official supplier of **EnBlue**, a diesel exhaust fluid (DEF) that significantly reduces the output of mono-nitrogen oxide (NOx) from diesel engines.

From October 2006 all diesel-fuelled commercial vehicles over 7.5 tonnes, such as trucks, lorries, buses and industrial vehicles, were manufactured with Selective Catalytic Reduction technology (SCR).

Originally introduced as part of a series of EU directives designed to reduce exhaust emissions, SCR is a key factor in the government's commitment to reduce emissions by 2050.

### How does it work?

---

**EnBlue** is placed in a designated **EnBlue** tank on the vehicle with its own gauge and sensor system. It's sprayed onto the exhaust fumes soon after combustion and works by catalysing the breakdown of NOx into nitrogen and water.

### How much do I need?

---

As **EnBlue** is an exhaust additive, it's used at a much slower rate than your fuel – around a rate of 5% **EnBlue** to diesel fuel.

### How much can I buy?

---

Our **EnBlue** is available in 20-litre, 210-litre and 1,000 litre packs, so we're able to supply as much as you need for your usage.

### How do I store it?

---

**EnBlue** must be stored in a cool and well-ventilated container or tank. It must be kept out of direct sunlight, at an ideal temperature between -11°C and 30°C. Under these conditions **EnBlue** can be stored for around 12 months before it begins to degrade.

### Does EnBlue need any special handling?

---

**EnBlue** requires special handling, especially in large quantities. Please speak to our advisers for advice on storage and dispensing equipment that aids safe handling.

# EnBlue™



## THE FUEL EXPERTS

We believe excellent service before and after your order is paramount to our continued success. When combining this with our first-class local knowledge, competitive prices and efficient deliveries, we are confident we can provide a complete solution you can rely on.



Distributed by :



**POLY DYNAMIC ENGINEERING**  
(Company No: 003351429-U)

## EnBlue Specifications: ISO 22241

AUS 32 Diesel Engine Fluid (**EnBlue**) must meet ISO 22241 specifications in order to be used in Euro 6 diesel engines. Learn what these specifications are

## Read the ISO 22241 Specifications for EnBlue

Aqueous Urea Solution 32 Diesel Engine Fluid, more simply AUS 32 DEF, or better yet **EnBlue** is manufactured to meet ISO 22241 standards in order to be compliant to be used in modern diesel engines.

## ISO 22241 Specifications: Physical and chemical properties of EnBlue

In order to be used in Euro 6 diesel engines, **EnBlue** needs to meet the BS ISO 22241 specifications, which it does by having the required physical properties and chemical properties. The table below illustrates the properties **EnBlue** needs to have.

Parameter	Minimum	Maximum	Unit
Appearance	Colourless Liquid with slight ammonia odour		
Freezing point	-11°C	-11°C	°C
Boiling point	100°C	100°C	°C
Basicity	9	10	pH
Flash point	not applicable (non-flammable)		
Water solubility	100		g/l
Viscosity at 20°C	1.4	1.4	mPa.s
Urea Content	31.8	33.2	%
Density at 20°C	1.087	1.093	g/cm <sup>3</sup>
Refracting index at 20°C	1.3814	1.3843	
Alkalinity as NH <sub>3</sub>		0.2	%

Parameter	Minimum	Maximum	Unit
Biuret		0.3	%
Insolubles 20 mg/kg		20	mg/kg
Aldehyde 5 mg/kg		5	mg/kg
Phosphate (PO4)		0.5	mg/kg
Calcium		0.5	mg/kg
Iron		0.5	mg/kg
Aluminium		0.5	mg/kg
Magnesium		0.5	mg/kg
Sodium		0.5	mg/kg
Potassium		0.5	mg/kg
Copper		0.2	mg/kg
Zinc		0.2	mg/kg
Chromium		0.2	mg/kg
Nickel		0.2	mg/kg



## CERTIFICATE OF ANALYSIS

<b>Client</b> : Poly Dynamic Engineering <b>Attn To</b> : MR. SOH TZE LOON <b>Address</b> : NO. 11, JALAN P4/11A, SEKSYEN 4, BANDAR TECNOLOGY KAJANG, 43500 KAJANG, SELANGOR  <b>Mobile No.</b> : 012-312 3252 <b>Email</b> : sabah129@hotmail.com <b>Date Received</b> : 19.04.2023 <b>Date Tested</b> : 26.04.2023 <b>Date Reported</b> : 02.05.2023	<b>Lab Reference No.</b> : 2023-PKL-00195 <b>Sample No.</b> : 2023-PKL-00195-01 <b>Product</b> : ADBLUE <b>Source</b> : ENBLUE
--	---

On testing, the following results were obtained:

No.	TEST ITEM	METHOD	UNIT	LIMIT	RESULT
1	Urea Content	ISO 22241-2 Annex B	mass%	31.8 - 33.2	32.3
2	Refractive Index (nD20)	ISO 22241-2 Annex C	-	1,3814 - 1,3843	1.3838
3	Alkalinity as NH3	ISO 22241-2 Annex D	mass%	Max 0.2	<0.10
4	Biuret	ISO 22241-2 Annex E	mass%	Max 0.3	0.30
5	Aldehydes	ISO 22241-2 Annex F	mg/kg	Max 5	<5.0
6	Insoluble Matter	ISO 22241-2 Annex G	mg/kg	Max 20	12
7	Phosphate (PO4)	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
8	Aluminum	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
9	Calcium	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
10	Chromium	ISO 22241-2 Annex I	mg/kg	Max 0.2	<0.10
11	Copper	ISO 22241-2 Annex I	mg/kg	Max 0.2	<0.10
12	Iron	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
13	Potassium	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
14	Magnesium	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
15	Sodium	ISO 22241-2 Annex I	mg/kg	Max 0.5	<0.10
16	Nickel	ISO 22241-2 Annex I	mg/kg	Max 0.2	<0.10
17	Zinc	ISO 22241-2 Annex I	mg/kg	Max 0.2	0.10
18	Identity of Aus 32	ISO 22241-2 Annex J	-	Identical to reference	Identical

**Remarks:** (+) Denote off Specification.

Authorized Signature

**Ooi Yan Jie**  
Laboratory Manager

This test report is issued under the Company's general terms and conditions (copy available upon request and at <https://www.ccicsg.com/terms-and-conditions/>). Above tests performed in accordance with the latest issue of the relevant test method unless otherwise stated. The results shown above relate only to the items tested, unless otherwise specified. Precision parameters apply in the determination of above results. Please refer to latest editions of ASTM D3244; IP 367; ISO 4259; and Appendix E of IP standard methods for analysis & testing, for utilization of above test data to determine conformance with specifications. This report shall not be reproduced except in full, without the written approval of the Laboratory.

**CCIC P&O MALAYSIA SDN. BHD.**

Address: No.1, Jalan Sultan Alauddin 2, Bandar Sultan Suleiman, 42000 Port Klang, Selangor

Tel: +601 92768373

E-mail: [pk1.admin@ccicsg.com](mailto:pk1.admin@ccicsg.com)

Website: [www.ccicsg.com](http://www.ccicsg.com)

Company Registration Number: 826815-P



# SAFETY DATA SHEET



EnBlue™ Diesel Exhaust Fluid

## Section 1. Identification

<b>Product name</b>	: E n B l u e™ Diesel Exhaust Fluid
<b>Product type</b>	: Aqueous Urea Solution 32.5% : Liquid.
<b>Product use</b>	: Synthetic/Analytical chemistry. Aqueous Urea Solution 32.5%
<b>Supplier's details</b>	: Poly Dynamic Engineering 11 Jalan Sungai Jeluh 32/189, Bukit Naga, 40460 Shah Alam Selangor, Malaysia
<b>24-hour telephone</b>	: 6012-3123252

## Section 2. Hazards identification

<b>OSHA/HCS status</b>	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
<b>Classification of the substance or mixture</b>	: Not classified.
<b><u>GHS label elements</u></b>	
<b>Signal word</b>	: No signal word.
<b>Hazard statements</b>	: Not applicable
<b><u>Precautionary statements</u></b>	
<b>General</b>	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
<b>Prevention</b>	: Not applicable.
<b>Response</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Hazards not otherwise classified</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Automotive grade urea solution, AUS 32, Aqueous Urea Solution 32.5%



## Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Deionized WATER	66.3 - 67.7	7732-18-5
urea	31.8 - 33.2	57-13-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
WATER urea	None.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid.

**Color** : Colorless.

**Odor** : ammonia (pungent) [Slight]

**Odor threshold** : Not available.

## Section 9. Physical and chemical properties

<b>pH</b>	: Approximate 9
<b>Melting point</b>	: -11.111°C (12°F)
<b>Boiling point</b>	: Lowest known value: 100°C (212°F) (water).
<b>Critical temperature</b>	: Not available.
<b>Flash point</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Gas Density (lb/ft<sup>3</sup>)</b>	: Weighted average: 1.09
<b>Relative density</b>	: Not available.
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Flow time (ISO 2431)</b>	: Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Hazardous polymerization</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
urea	LD50 Oral	Rat	8471 mg/kg	-

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
urea	Skin - Mild irritant	Human	-	72 hours 22 mg l	-
	Skin - Moderate irritant	Human	-	24 hours 20 %	-

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

## Section 11. Toxicological information

<b>General</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
urea	Acute EC50 6573.1 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 3910000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 22.5 ppt Fresh water	Fish - Oreochromis mossambicus - Young	96 hours
	Chronic NOEC 2 g/L Fresh water	Fish - Heteropneustes fossilis	30 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
WATER	-1.38	-	low
urea	<-1.73	-	low

### Mobility in soil





**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT	TDG		IMDG	IATA
UN number	Not regulated.	Not regulated.		Not regulated.	Not regulated.
UN proper shipping name	-	-		-	-
Transport hazard class(es)	- 	- 		- 	- 
Packing group	-	-		-	-
Environmental hazards	No.	No.		No.	No.

### Additional information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

## Section 15. Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Section 16. Other information

### Hazardous Material Information System

Health	/	1
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.



## Section 16. Other information



### Procedure used to derive the classification

Classification	Justification
Not classified.	

### History

Date of printing	: 1 / 3 / 2 4
Date of issue/Date of revision	: 1 / 3 / 2 4
Version	: 2.01

### Key to abbreviations

:	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	UN = United Nations

### References

: Not available.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.