# DPF Preventive

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Issue date: 2/3/2016 Revision date: 4/20/2020 Supersedes: 6/26/2018 Version: 1.2

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

### 1.1. Product identifier

Product form : Mixture
Name : DPF Preventive
Product code : 3612
Article number : 3612

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Consumer use
Function or use category : Fuel additives

#### 1.2.2. Uses advised against

No additional information available

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

BARDAHL NL - OCD NEDERLAND BV
Maxwellstraat 41
3316 GP Dordrecht - Nederland
T 0031 78 651 2322 - F 0031 78 617 4848
mjkooijman@bardahl.nl - www.bardahl.nl

### 1.4. Emergency telephone number

Emergency number : +31 (0) 6 2908 2010
During office hours: 8.30 t/m 17:00 h

| Country | Official advisory body | Address | Emergency number | Comment |
|---|---|---|---|---|
| | Guy's & St Thomas' Poisons Unit<br>Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust | Avonley Road<br>SE14 5ER London | 0870 243 2241 | |
| Ireland | National Poisons Information Centre<br>Beaumont Hospital | PO Box 1297<br>Beaumont Road<br>9 Dublin | +353 1 809 2566 (Healthcare professionals-24/7)<br>+353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| Israel | Israel Poison Information Center<br>Rambam Health Care Campus | 6 Ha'Aliya Street<br>31096 Haifa | +972 4 854 1900 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital<br>MSD Msida | +356 2545 6504 | |
| United Kingdom | National Poisons Information Service (Birmingham Centre)<br>City Hospital | Dudley Road<br>B18 7QH Birmingham | 0344 892 0111 | |
| United Kingdom | National Poisons Information Service (Belfast Centre)<br>Royal Victoria Hospital | Grosvenor Road<br>BT12 6BA Belfast | 0344 892 0111 | |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

| | |
|---|---|
| Aspiration hazard, Category 1 | H304 |

Full text of H statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :

GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P262 - Do not get in eyes, on skin, or on clothing.
P331 - Do NOT induce vomiting.
P405 - Store locked up.
P501 - Dispose of contents/container to a hazardous or special waste collection point.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics | (EC-No.) 918-481-9<br>(REACH-no) 01-2119457273-39 | 80 – 100 | Asp. Tox. 1, H304 |
| 1,1'-Bis-(ferrocenyl)octane | (EC-No.) 479-710-1 | < 0.3 | Repr. 1B, H360FD<br>STOT RE 2, H373<br>Aquatic Chronic 4, H413 |
| naphthalene | (CAS-No.) 91-20-3<br>(EC-No.) 202-049-5<br>(EC Index-No.) 601-052-00-2 | ≤ 0.002 | Acute Tox. 4 (Oral), H302<br>Carc. 2, H351<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

Full text of 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 swallowed, seek medical advice immediately and show this container or label.

First-aid measures after inhalation : Allow affected person to breathe fresh air. Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash skin thoroughly with mild soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Prolonged or repeated contact may cause skin to become dry or cracked.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. Foam. Dry powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Incomplete combustion will generate poisonous carbon monoxide, carbon dioxide and other toxic gases.

### 5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Firefighting instructions : Prevent fire fighting water from entering the environment. Exercise caution when fighting any chemical fire. Evacuate area.

Protection during firefighting : Wear a self contained breathing apparatus.

## SECTION 6: Accidental release measures

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

General measures : Keep public away from danger area. Eliminate every possible source of ignition. Evacuate area. Equip cleanup crew with proper protection. Ventilate area.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Dam up the liquid spill. Dike for recovery or absorb with appropriate material.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

### 6.4. Reference to other sections

See Heading 8. See Heading 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

| | | |
|---|---|---|
| Precautions for safe handling | : | Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| Hygiene measures | : | Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. |

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

| | | |
|---|---|---|
| Technical measures | : | Provide local exhaust or general room ventilation. |
| Storage conditions | : | Store in a closed container. Keep out of frost. |
| Heat and ignition sources | : | Keep away from naked flames/heat. Keep away from ignition sources. |
| Storage area | : | Store in a dry place. Store in a well-ventilated place. |
| Special rules on packaging | : | Keep only in original container. |

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics | |
|---|---|
| **France - Occupational Exposure Limits** | |
| VME (mg/m³) | 1200 mg/m³ |
| VME (ppm) | 184 ppm |
| **Netherlands - Occupational Exposure Limits** | |
| Grenswaarde TGG 8H (mg/m³) | 5 |
| Grenswaarde TGG 15MIN (mg/m³) | 10 mg/m³ |

| naphthalene (91-20-3) | |
|---|---|
| **EU - Occupational Exposure Limits** | |
| IOELV TWA (mg/m³) | 52 mg/m³ |
| IOELV TWA (ppm) | 10 ppm |
| IOELV STEL (mg/m³) | 79 mg/m³ |
| IOELV STEL (ppm) | 15 ppm |
| **Austria - Occupational Exposure Limits** | |
| MAK (mg/m³) | 50 mg/m³ |
| **Belgium - Occupational Exposure Limits** | |
| Limit value (mg/m³) | 50 mg/m³ |
| Short time value (mg/m³) | 53 mg/m³ |
| **Bulgaria - Occupational Exposure Limits** | |
| OEL TWA (mg/m³) | 50 mg/m³ 8h |
| OEL STEL (mg/m³) | 75 mg/m³ 15 min |

| | |
|---|---|
| **Denmark - Occupational Exposure Limits** | |
| Grænseværdie (kortvarig) (mg/m³) | 50 mg/m³ |
| **Finland - Occupational Exposure Limits** | |
| HTP-arvo (8h) (mg/m³) | 5 mg/m³ |
| HTP-arvo (15 min) | 100 mg/m³ |
| **France - Occupational Exposure Limits** | |
| VME (mg/m³) | 50 mg/m³ |
| VME (ppm) | 10 ppm |
| **Germany - Occupational Exposure Limits (TRGS 900)** | |
| Occupational exposure limit value (mg/m³) | 50 mg/m³ |
| **Netherlands - Occupational Exposure Limits** | |
| Grenswaarde TGG 8H (mg/m³) | 50 mg/m³ |
| Grenswaarde TGG 15MIN (mg/m³) | 80 mg/m³ |
| **United Kingdom - Occupational Exposure Limits** | |
| WEL TWA (mg/m³) | 50 mg/m³ |
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH TWA (mg/m³) | 10 mg/m³ |
| ACGIH STEL (mg/m³) | 15 fibers/cm³ |

Additional information : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure

## 8.2. Exposure controls

**Personal protective equipment:**
Gloves. Safety glasses.

**Hand protection:**

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|---|---|---|---|---|---|
| Safety gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | | 3 (> 0.65) | EN ISO 374 |

**Eye protection:**

| Type | Use | Characteristics | Standard |
|---|---|---|---|
| Safety glasses | | With side shields | EN 166 |

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Good ventilation of the workplace required. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment

**Personal protective equipment symbol(s):**

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Appearance | : | clear. |
| Colour | : | brown. orange. |
| Odour | : | No data available |
| Odour threshold | : | No data available |
| pH | : | No data available |
| Relative evaporation rate (butylacetate=1) | : | No data available |
| Melting point | : | No data available |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | 63 °C |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Density | : | 0.789 g/cm³ 20°C |
| Solubility | : | No data available |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |
| Viscosity, kinematic | : | < 20 mm²/s 40°C |
| Viscosity, dynamic | : | No data available |
| Explosive properties | : | No data available |
| Oxidising 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

Stable under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Open flame. Sparks. Heat. Water, humidity. Freezing.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Acute toxicity (dermal) : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Acute toxicity (inhalation) : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics | |
|---|---|
| LD50 oral rat | 5000 mg/kg |
| LD50 dermal rat | > 5000 mg/kg |
| LC50 inhalation rat (mg/l) | > 4900 mg/m³ |

| naphthalene (91-20-3) | |
|---|---|
| LD50 oral rat | 2600 mg/kg |
| LD50 dermal rat | > 2500 mg/kg |

| 1,1'-Bis-(ferrocenyl)octane | |
|---|---|
| LD50 oral rat | > 2000 OECD 423 |
| LD50 dermal rat | > 2000 OECD 402 |

Skin corrosion/irritation : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Serious eye damage/irritation : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Respiratory or skin sensitisation : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Germ cell mutagenicity : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Carcinogenicity : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Reproductive toxicity : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

STOT-single exposure : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

STOT-repeated exposure : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Aspiration hazard : May be fatal if swallowed and enters airways.

| DPF Preventive | |
|---|---|
| Viscosity, kinematic | < 20 mm²/s 40°C |

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008
Hazardous to the aquatic environment, long-term (chronic) : Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics | |
|---|---|
| LC50 fish 1 | 2 mg/l (4 days) |
| EC50 Daphnia 1 | 3 mg/l (aquatic invertebrates) |
| EC50 72h algae (1) | 1.1 mg/l |

| naphthalene (91-20-3) | |
|---|---|
| LC50 fish 1 | 0.51 mg/l |
| EC50 Daphnia 1 | 3.4 mg/l |

| 1,1'-Bis-(ferrocenyl)octane | |
|---|---|
| LC50 fish 1 | > 0.5 mg/l OECD 203 |
| EC50 Daphnia 1 | > 0.36 mg/l OECD 202 |
| EC50 72h algae (1) | > 0.36 mg/l OECD 201 |

### 12.2. Persistence and degradability

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics | |
|---|---|
| Biodegradation | 80 % (28 days) |

| naphthalene (91-20-3) | |
|---|---|
| Persistence and degradability | Inherently biodegradable. |

| 1,1'-Bis-(ferrocenyl)octane | |
|---|---|
| Persistence and degradability | Almost not biodegradable. |

### 12.3. Bioaccumulative potential

| 1,1'-Bis-(ferrocenyl)octane | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 4.6 |
| Bioaccumulative potential | Bioaccumulation potential. |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Sewage disposal recommendations : Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Collect all waste in suitable and labelled containers and dispose according to local legislation.
Additional information : Empty the packaging completely prior to disposal. Do not re-use empty containers.
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.2. UN proper shipping name** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| 14.3. Transport hazard class(es) | | | | |
|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.4. Packing group** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.5. Environmental hazards** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Clean up even minor leaks or spills if possible without unnecessary risk | | | | |

### 14.6. Special precautions for user

**Overland transport**
Not applicable

**Transport by sea**
Not applicable

**Air transport**
Not applicable

**Inland waterway transport**
Not applicable

**Rail transport**
Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : Detergent Regulation. aliphatic hydrocarbons ≥ 30%. aromatic hydrocarbons <5%.

#### 15.1.2. National regulations

**France**
Occupational diseases : RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel

**Germany**
Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

**Netherlands**
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

**Denmark**

| | | |
|---|---|---|
| Class for fire hazard | : | Class III-1 |
| Store unit | : | 50 liter |
| Classification remarks | : | Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed |
| Danish National Regulations | : | Young people below the age of 18 years are not allowed to use the product |
| Danish National Regulations (Additional) | : | Pregnant/breastfeeding women working with the product must not be in direct contact with the product |

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

**Indication of changes:**

| Section | Changed item | Change | Comments |
|---|---|---|---|
| 1.1 | Name | Modified | |
| 2.2 | Precautionary statements (CLP) | Modified | |
| 3 | Composition/information on ingredients | Modified | |
| 7.2 | Technical measures | Added | |
| 7.2 | Storage area | Added | |
| 7.2 | Special rules on packaging | Added | |
| 7.2 | Heat and ignition sources | Added | |
| 7.2 | Storage conditions | Modified | |
| 8.2 | Respiratory protection | Modified | |
| 9.1 | Viscosity, kinematic | Modified | |
| 9.1 | Density | Added | |
| 9.1 | Flash point | Modified | |
| 9.1 | Colour | Modified | |
| 13.1 | Waste treatment methods | Added | |
| 13.1 | Sewage disposal recommendations | Added | |
| 13.1 | Additional information | Added | |
| 13.1 | Ecology - waste materials | Added | |
| 13.1 | Waste disposal recommendations | Modified | |
| 15.1 | Other information, restriction and prohibition regulations | Added | |
| 15.1 | Recommendations Danish Regulation (Additional) | Added | |

| **Abbreviations and acronyms:** | |
|---|---|
| | Abbreviations and acronyms:<br><br>RID: Regulations Concerning the International Transport of Dangerous Goods by Rail<br>ICAO: International Civil Aviation Organization<br>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road<br>IMDG: International Maritime Code for Dangerous Goods<br>IATA: International Air Transport Association<br>GHS: Globally Harmonized System of Classification and labelling of Chemicals<br>EINECS: European Inventory of Existing Commercial Chemical Substances<br>ELINCS: European List of Notified Chemical Substances<br>CAS: Chemical Abstracts Service (division of the American Chemical Society)<br>VOC: Volatile Organic Compounds (USA, EU)<br>LC50: Lethal concentration, 50 percent<br>LD50: Lethal dose, 50 percent |

| **Full text of H- and EUH-statements:** | |
|---|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment — Chronic Hazard, Category 4 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Repr. 1B | Reproductive toxicity, Category 1B |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H351 | Suspected of causing cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

SDS EU (REACH Annex II)

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.