

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 03/02/2016 Revision date: 20/04/2020 Supersedes version of: 26/06/2018 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

UFI : FREP-XDWY-SA0J-RWSQ

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 54924171

During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

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- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)



GHS08

Signal word (CLP) : Danger

Contains : 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

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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 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 STOT RE 2, H373 Aquatic Chronic 4, H413
naphthalene	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2	≤ 0.002	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H- and EUH-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.

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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

Firefighting instructions

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

: 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 Section 8. See Heading 13.

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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

8.1.1 National occupational exposure and biological limit values

naphthalene (91-20-3)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	52 mg/m³		
OEL TWA [ppm] 10 ppm			
IOEL STEL	79 mg/m³		
IOEL STEL [ppm] 15 ppm			
United Kingdom - Occupational Exposure Limits			
WEL TWA (OEL TWA) [1] 50 mg/m³			

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information

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

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

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Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection				
Type Field of application Characteristics Standard				
Safety glasses		With side shields	EN 166	

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Safety gloves	Nitrile rubber (NBR)	6 (> 480 minutes)		3 (> 0.65)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : brown orange. Appearance : clear. Odour : Not available Odour threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Not available Lower explosion limit : Not available Upper explosion limit : Not available : 63 °C Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available Not available рΗ < 20 mm²/s 40°C Viscosity, kinematic Not available Solubility Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50°C Not available 0.789 g/cm3 20°C Density Relative density Not available Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics				
LD50 oral rat	5000 mg/kg			
LD50 dermal rat	> 5000 mg/kg			
LC50 Inhalation - Rat	> 4900 mg/m³			
naphthalene (91-20-3)	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				
Serious eve damage/irritation :	Not classified			

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

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STOT-single exposure : Not classified STOT-repeated exposure : Not classified

1,1'-Bis-(ferrocenyl)octane

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

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

DPF Preventive

Viscosity, kinematic < 20 mm²/s 40°C

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics				
C50 - Fish [1] 2 mg/l (4 days)				
EC50 - Crustacea [1]	3 mg/l (aquatic invertebrates)			
EC50 72h - Algae [1]	1.1 mg/l			
naphthalene (91-20-3)				
LC50 - Fish [1]	C50 - Fish [1] 0.51 mg/l			
EC50 - Crustacea [1] 3.4 mg/l				
1,1'-Bis-(ferrocenyl)octane				
C50 - Fish [1] > 0.5 mg/l OECD 203				
EC50 - Crustacea [1]	C50 - Crustacea [1] > 0.36 mg/l OECD 202			
C50 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.	

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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

 $: \ \, \text{Dispose of this material and its container to hazardous or special waste collection point, in} \\$

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 / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID			
14.1. UN number or ID n	14.1. UN number or ID number						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.2. UN proper shippin	g name						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport hazard o	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 haz	14.5. Environmental hazards						
Not applicable	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

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Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

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

Other information, restriction and prohibition regulations

: Detergent Regulation. aliphatic hydrocarbons \geq 30%. aromatic hydrocarbons <5%.

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

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	Storage conditions	Modified	
7.2	Heat and ignition sources	Added	

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Indication of changes	ndication of changes				
Section	Changed item	Change	Comments		
7.2	Special rules on packaging	Added			
7.2	Storage area	Added			
7.2	Technical measures	Added			
8.2	Respiratory protection	Modified			
9.1	Colour	Modified			
9.1	Flash point	Modified			
9.1	Density	Added			
9.1	Viscosity, kinematic	Modified			
13.1	Waste disposal recommendations	Modified			
13.1	Ecology - waste materials	Added			
13.1	Additional information	Added			
13.1	Sewage disposal recommendations	Added			
13.1	Waste treatment methods	Added			
15.1	Other information, restriction and prohibition regulations	Added			

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

LC50: Lethal concentration, 50 percent 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	
EUH066	Repeated exposure may cause skin dryness or cracking.	
Flam. Sol. 2	Flammable solids, Category 2	
H228	Flammable solid.	
H302	Harmful if swallowed.	

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Full text of H- and EUH-statements:		
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.	
Repr. 1B	Reproductive toxicity, Category 1B	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

Safety Data Sheet (SDS), EU

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.