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

1.1. Product identifier

Trade name/designation : Performance DFI Direct Fuel Injection
Product code : 858037QB1, 858038QB1, 858039Q01, 858039QB1

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

Main use category : Industrial use, Professional use, Consumer use
Specific use(s) : Lubricants

1.3. Details of the supplier of the safety data sheet

Company : Brunswick Marine EMEA
Parc industriel de Petit-Rechain, Avenue Mercury 8
4800 Verviers , Belgium
Telephone +32 (0)87 32 32 11

1.4. Emergency telephone number

Emergency telephone : 0032 3 575 55 55

IRELAND (REPUBLIC OF)

National Poisons Information Centre
Beaumont Hospital +353 18 37 99 64/+353 1 809 21 66

UNITED KINGDOM

National Poisons Information Service
(Newcastle Centre) 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
Regional Drugs and Therapeutics Centre,
Wolfson Unit

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification : The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Skin Irrit. 2 H315
Eye Irrit. 2 H319
Skin Sens. 1 H317
STOT SE 3 H336

Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : This mixture is classified as hazardous according to 1999/45/EC.
Xi; R38
R43

Full text of R-phrases: see section 16

2.2. Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

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Hazard pictograms :



GHS07

Signal word :

Warning

Contains :

Distillates (petroleum), hydrotreated light
Isooctadecanoic acid, reaction products with tetraethylenepentamine

Hazard statements :

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Precautionary statements :

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P271 - Use only outdoors or in a well-ventilated area.
P302+P352 - IF ON SKIN: Wash with plenty of water/
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

2.3. Other hazards

Other hazards :

Results of PBT and vPvB assessment :
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Distillates (petroleum), hydrotreated light	(CAS No.) 64742-47-8 (EC No) 265-149-8 (EC Index) 649-422-00-2	20 - 25	Xi; R38 N; R51/53
Isooctadecanoic acid, reaction products with tetraethylenepentamine	(CAS No.) 68784-17-8 (EC No) 272-225-4	11,6	Xi; R36/38 R43 R52/53

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated light	(CAS No.) 64742-47-8 (EC No) 265-149-8 (EC Index) 649-422-00-2	20 - 25	Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Isooctadecanoic acid, reaction products with tetraethylenepentamine	(CAS No.) 68784-17-8 (EC No) 272-225-4	11,6	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Full text of R- and H-phrases: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

- Inhalation : Remove person to fresh air and keep comfortable for breathing.
When in doubt or if symptoms are observed, get medical advice.
- Skin contact : Take off contaminated clothing.
Gently wash with plenty of soap and water.
When in doubt or if symptoms are observed, get medical advice.
- Eye contact : Rinse immediately carefully and thoroughly with eye-bath or water.
Remove contact lenses, if present and easy to do. Continue rinsing.
When in doubt or if symptoms are observed, get medical advice.
- In case of ingestion : Rinse mouth thoroughly with water.
Get medical advice/attention.
- Additional advice : First aider: Pay attention to self-protection!
Personal protection equipment: see section 8
Never give anything by mouth to an unconscious person or a person with cramps.
When in doubt or if symptoms are observed, get medical advice.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.

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

- Inhalation : May cause drowsiness or dizziness.
- Skin contact : May cause an allergic skin reaction. Causes skin irritation.
- Eye contact : Causes serious eye irritation.
- Ingestion : The following symptoms may occur: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide
- Extinguishing media which must not be used for safety reasons: : Strong water jet

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible
- Specific hazards : Heating causes rise in pressure with risk of bursting.
Hazardous combustion products:
Carbon oxides

5.3. Advice for firefighters

- Advice for firefighters : Special protective equipment for firefighters.
In case of fire: Wear self-contained breathing apparatus.
Use water spray jet to protect personnel and to cool endangered containers.
Do not allow run-off from fire-fighting to enter drains or water courses.
Dispose according to legislation.
Evacuate area.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel : Evacuate area.
Stay upwind/keep distance from source.
Provide adequate ventilation.
Use personal protective equipment as required.
Personal protection equipment: see section 8
Do not breathe vapour/spray.
Avoid contact with skin, eyes and clothes.
- For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.
Personal protection equipment: see section 8.

6.2. Environmental precautions

- Environmental precautions : Do not allow to enter into ground-water, surface water or drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Stop leak if safe to do so.
Dam up.
Clean-up methods - small spillage: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents)., Collect in closed and suitable containers for disposal.
Clean-up methods - large spillage: Large spills should be collected mechanically (remove by pumping) for disposal., Collect in closed and suitable containers for disposal.
Dispose of waste product or used containers according to local regulations.

6.4. Reference to other sections

- Personal protection equipment: see section 8
Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Handling : Provide adequate ventilation.
Use personal protective equipment as required.
Personal protection equipment: see section 8
Do not breathe vapour/spray.
Avoid contact with skin, eyes and clothes.
Take any precaution to avoid mixing with incompatible materials.
See also section 10
Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time).
Do not allow contact with soil, surface or ground water.
- Advices on general occupational hygiene : Keep good industrial hygiene.
Wash hands before breaks and immediately after using the product.
When using do not eat, drink or smoke.
Keep away from food, drink and animal feedingstuffs.
Keep work clothes separately.
Take off contaminated clothing.
Wash contaminated clothing before reuse.
Contaminated work clothing should not be allowed out of the workplace.

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7.2. Conditions for safe storage, including any incompatibilities

- Storage : Keep in a dry, cool and well-ventilated place.
Do not store near or with any of the incompatible materials listed in section 10.
Bund storage facilities to prevent soil and water pollution in the event of spillage.
- Packaging materials : Keep/Store only in original container.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- Exposure limit values : Not applicable

8.2. Exposure controls

- Personal protection equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Half-face mask (EN 140)
Full face mask (EN 136)
Filter type: ABEK + P (EN 141)
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)
- Hand protection : Wear chemically resistant gloves (tested to EN374) ,The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
- Eye protection : Use suitable eye protection. (EN166): Goggles
- Body protection : Wear suitable protective clothing.
- Thermal hazard protection : Not required under normal use.
Use dedicated equipment.
- Engineering control measures : Provide adequate ventilation.
Organisational measures to prevent/limit releases, dispersion and exposure
Safe handling: see section 7 .
Use only outdoors or in a well-ventilated area.
Store locked up.
- Environmental exposure controls : Do not allow contact with soil, surface or ground water.
Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Appearance : liquid
- Colour : dark amber
- Odour : hydrocarbon-like
- Odour threshold: : No data available
- pH : No data available

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Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: 72 °C
Evaporation rate	: < 1 (n-butyl acetate = 1)
Flammability (solid, gas)	: Not applicable, liquid, Not applicable
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: < 1 mmHg
Vapour density	: > 1 (Air = 1.0)
Density	: < 0,8599 g/cm ³
Relative density	: No data available
Water solubility	: Negligible
Solubility in different media	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: 35 mm ² /s (40 °C) 6,5 mm ² /s (100 °C)
Kinematic viscosity	: 35 mm ² /s (40 °C)
Explosive properties	: Not applicable The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.

9.2. Other information

VOC content : 235 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : None under normal processing.
Reference to other sections:

10.2. Chemical stability

Stability : The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions : None under normal processing.

10.4. Conditions to avoid

Conditions to avoid : Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Safe handling: see section 7

10.5. Incompatible materials

Incompatible materials : Oxidising substances, Safe handling: see section 7

10.6. Hazardous decomposition products

Hazardous decomposition products : Reference to other sections: 5.2

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met.)

Distillates (petroleum), hydrotreated light (64742-47-8)	
LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5,2 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
pH: No data available

Serious eye damage/eye irritation : Causes serious eye irritation.
pH: No data available

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met.)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met.)

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met.)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

Other information

Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Toxicity : According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

Performance DFI Direct Fuel Injection	
LC50 fish 1	> 4566 (96 h)
EC50 Daphnia 1	4475 mg/l (48 h)
ErC50 (algae)	146 mg/l (72 h)

Distillates (petroleum), hydrotreated light (64742-47-8)	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2,2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and degradability

Persistence and degradability : No data available

12.3. Bioaccumulative potential

Bioaccumulation : No data available

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Partition coefficient n-octanol/water : No data available

12.4. Mobility in soil

Mobility : No data available

12.5. Results of PBT and vPvB assessment

PBT/vPvB data : Not applicable

12.6. Other adverse effects

Other information : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product waste: : Do not allow contact with soil, surface or ground water.
Dispose of empty containers and wastes safely.
Safe handling: see section 7
Refer to manufacturer/supplier for information on recovery/recycling.
Recycling is preferred to disposal or incineration
If recycling is not possible, eliminate in accordance with local valid waste disposal regulations

Contaminated packaging : Handle contaminated packages in the same way as the substance itself.
Dispose according to legislation.

List of proposed waste codes/waste designations in accordance with EWC : This material and its container must be disposed of as hazardous waste.
Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

14.1. UN number

UN number : NA

14.2. UN proper shipping name

Proper Shipping Name : NA

14.3. Transport hazard class(es)

14.3.1. Overland transport

ADR/RID : Not classified for this transport way.
Class(es) : Not applicable

14.3.2. Inland waterway transport (ADN)

ADN : Not classified for this transport way.

14.3.3. Transport by sea

IMDG : Not classified for this transport way.
Class or Division : Not applicable

14.3.4. Air transport

ICAO/IATA : Not classified for this transport way.
Class or Division : Not applicable

14.4. Packing group

Packing group : NA

14.5. Environmental hazards

Other information : Not applicable.

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14.6 Special precautions for user

Special precautions for user : Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : 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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006 :

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 : Performance DFI Direct Fuel Injection

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. : Distillates (petroleum), hydrotreated light

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. : none

Authorisations : Not applicable

VOC content : 235 g/l

15.1.2. National regulations

DE : WGK : 3

15.2. Chemical safety assessment

Chemical Safety Assessment : Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Aquatic Chronic 2	: Hazardous to the aquatic environment - chronic hazard category 2
Aquatic Chronic 3	: Hazardous to the aquatic environment - chronic hazard category 3
Eye Irrit. 2	: Serious eye damage/eye irritation Category 2
Skin Irrit. 2	: Skin corrosion/irritation, Category 2
Skin Sens. 1	: Skin sensitisation, hazard category 1
STOT SE 3	: Specific target organ toxicity — Single exposure, Category 3, Narcosis
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

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R36/38	: Irritating to eyes and skin.
R38	: Irritating to skin.
R43	: May cause sensitisation by skin contact.
R51/53	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
N	: Dangerous for the environment
Xi	: Irritant

Key literature references and sources for data : LOLI
<http://www.echemportal.org>
MSDS

Abbreviations and acronyms : ABM = Algemene beoordelingsmethodiek
ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
BTT = Breakthrough time (maximum wearing time)
DMEL = Derived minimal effect level
DNEL = Derived No Effect Level
EC50 = Median Effective Concentration
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
EWC = European Waste Catalogue
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
NA = Not applicable
NOEC = No observed effect concentration
NOEL: no-observed-effect level
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
N.O.S. = Not Otherwise Specified
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
PNEC = Predicted No Effect Concentration
Quantitative structure-activity relationship (QSAR)
STOT = Specific Target Organ Toxicity
TWA = time weighted average
VOC = Volatile organic compounds
WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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