



Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 5-1-2012 Revision date: 4-10-2019 Supersedes: 2-9-2015 version: 4.2

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

1.1. Product identifier

Product form : Mixture
Product name : Marine FC-W Engine Oil 4-Stroke Inboard 25W-40
Product code : BL022000
Product group : Trade product

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Outboard motors
Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

MPM International Oil Company
Cyclotronweg 1
2629 HN Delft - Nederland
T +31 (0)15 2514030 - F +31 (0)15 2514031
msds@mpmoil.nl - www.mpmoil.nl

1.4. Emergency telephone number

Emergency number : +31 (0)15 2514030 (08.00 - 17.00 GMT+1)

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

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]

CLP Signal word : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	(CAS-No.) 72623-87-1 (EC-No.) 276-738-4 (EC Index-No.) 649-483-00-5 (REACH-no) 01-2119474889-13	1 - 25	Asp. Tox. 1, H304
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)	(CAS-No.) 93819-94-4 (EC-No.) 298-577-9 (REACH-no) 01-2119543726-33	1 - 2,5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Reaction products of benzeneamine, N-phenyl- with nonene (branched)	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	0,1 - 2,5	Aquatic Chronic 4, H413
Nonylphenol, branched, ethoxylated substance listed as REACH Candidate substance listed in REACH Annex XIV (4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof))	(CAS-No.) 68412-54-4 (EC-No.) 500-209-1	0,1 - 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Dodecylphenol, mixed isomers (branched)	(CAS-No.) 121158-58-5 (EC-No.) 310-154-3 (REACH-no) 01-2119513207-49	<= 1	Skin Corr. 1C, H314 Eye Dam. 1, H318 Repr. 1B, H360F Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)	(CAS-No.) 93819-94-4 (EC-No.) 298-577-9 (REACH-no) 01-2119543726-33	(6,25 =<C < 100) Skin Irrit. 2, H315 (10 =<C < 12,5) Eye Irrit. 2, H319 (12,5 =<C < 100) Eye Dam. 1, H318

Comments : Highly refined mineral oil, contains <3% (w / w) DMSO extract, according to IP346

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General	: In all cases of doubt, or when symptoms persist, seek medical attention.
After inhalation	: No special measures are necessary.
After skin contact	: Wash with plenty of soap and water.
After eye contact	: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
After ingestion	: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : powder, alcohol-resistant foam, water spray, carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Other information : Exercise caution when fighting any chemical fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : May be dangerously slippery if spilled. When using do not smoke.

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

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

Do not release in groundwater, surfacewater or sewerage.

6.3. Methods and material for containment and cleaning up

For containment : Prevent spreading over great surfaces (e.g. by damming or installing oil booms).
Methods for cleaning up : Clean up with absorbent material (for example sand, sawdust, neutral absorbent granule, silica gel).
Other information : Can be slippery on hard, smooth walking area.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking.
Hygiene measures : Wash hands before breaks and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible products : Strong acid. alkali. Strong oxidizing agent.
Storage temperature : < 40 °C
Storage area : Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

EU	IOELV TWA (mg/m ³)	5 mg/m ³
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)		
EU	IOELV TWA (mg/m ³)	5 mg/m ³
EU	IOELV STEL (mg/m ³)	10 mg/m ³
Germany	TRGS 910 Acceptable concentration notes	

8.2. Exposure controls

Technical measures:

Provide adequate ventilation.

Personal protective equipment:

Gloves. Safety glasses.

Materials for protective clothing:

Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Hand protection:

protective gloves. Wear suitable gloves resistant to chemical penetration

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR)	5 (> 240 minutes)	>0.35		EN ISO 374

Eye protection:

Safety glasses

Skin and body protection:

None under normal use

Respiratory protection:

Not necessary with sufficient ventilation

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily.
Colour	: brown.
Odour	: characteristic.
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	: > 240 °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	: 895 g/l
Solubility	: Slightly soluble, the product remains on the water surface. Water: Negligible.
Log Pow	: No data available
Viscosity, kinematic	: 132 mm ² /s 40C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

10.2. Chemical stability

The product is stable at normal handling- and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Oxidizing substances. Acids and bases.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

LD50 oral rat	No data available
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Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)

LD50 oral rat	2600 mg/kg
LD50 dermal rat	> 3160 mg/kg OECD 402
LC50 inhalation rat (mg/l)	> 2 mg/l 1h OECD 403 -read across

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)

LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Dodecylphenol, mixed isomers (branched) (121158-58-5)

LD50 oral rat	2100 mg/kg OECD 401
LD50 dermal rabbit	15000 mg/kg OECD 402
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Additional information	: slightly irritant but not relevant for classification.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Viscosity, kinematic	132 mm ² /s 40C
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	: Harmful to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

LC50 fish 1	No data available
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Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)

LC50 fish 1	4,5 ml/l OECD 203 (oncorhynchys mykiss, 96h)
EC50 Daphnia 1	5,4 mg/l OECD 202, (Daphnia magna, 72h)
EC50 other aquatic organisms 1	2,1 ml/l OECD 201 (Selenastrum capricornutum , 48h)

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)

LC50 fish 1	> 100 mg/l Brachydanio rerio
LC50 other aquatic organisms 1	600 mg/l @ 72h (Algae)
EC50 Daphnia 1	> 100 mg/l Daphnia magna
EC50 other aquatic organisms 1	> 100 mg/l OECD 201 (Desmodesmus subspicatus @72h)
EC50 72h algae (1)	500 mg/l Chlorophyta
EC50 96h algae (1)	870 mg/l
NOEC chronic algae	33 mg/l @ 96h

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

Dodecylphenol, mixed isomers (branched) (121158-58-5)	
LC50 fish 1	40 mg/l Pimephales promelas
EC50 Daphnia 1	0,037 mg/l
EC50 Daphnia 2	0,0079 mg/l @21d
EC50 other aquatic organisms 1	0,36 Chlorophyta
EC50 other aquatic organisms 2	> 1000 mg/l @0.1d - slib
EC50 72h algae (1)	0,15 mg/l OECD 201 Desmodesmus subspicatus
EC50 96h algae (2)	> 0,58 mg/l Mysidopsis Bahia
NOEC (chronic)	0,0037 mg/l @21d - Daphnia

12.2. Persistence and degradability

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.

Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)	
Biodegradation	1,5 % OECD 301B 28d

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Persistence and degradability	Poorly biodegradable.
Biodegradation	0 % @28d

Dodecylphenol, mixed isomers (branched) (121158-58-5)	
Biodegradation	25 % Sturm-test @28d

12.3. Bioaccumulative potential

Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)	
Log Pow	0,9 @ 23C

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
Log Pow	> 6
Bioaccumulative potential	highly bioaccumulative.

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Bioconcentration factor (BCF REACH)	1585
Log Pow	> 7,6
Log Kow	10,88 -
Bioaccumulative potential	Bioaccumulative potential.

Dodecylphenol, mixed isomers (branched) (121158-58-5)	
Bioconcentration factor (BCF REACH)	497,33 7,1 @0,1d
Log Kow	7,1 @ 0,1d

12.4. Mobility in soil

Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)	
Soil	Adsorbs into the soil.

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Log Koc	> 2000
Soil	Adsorbs into the soil.

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

Dodecylphenol, mixed isomers (branched) (121158-58-5)

Soil No data 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

Regional legislation (waste) : Waste disposal according to official state regulations.
Waste disposal recommendations : Remove to an authorized waste treatment plant.
European List of Waste (LoW) code : 13 02 00 - waste engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable
14.4. Packing group	
Not applicable	Not applicable
14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
No supplementary information available	

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

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 a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Nonylphenol, branched, ethoxylated (EC 500-209-1, CAS 68412-54-4)

Contains 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

VOC content : 0 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

Marine FC-W Engine Oil 4-Stroke Inboard 25W-40

Safety Data Sheet

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

SECTION 16: Other information

Full text of H- and EUH-statements:	
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 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

SDS MPM REACH

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.