



Marine Gear Oil Reversing Clutch

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 21-11-2017 Supersedes: 7-1-2015 version: 4.0

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

1.1. Product identifier

Product form : Mixture
Product name : Marine Gear Oil Reversing Clutch
Product code : BL057000
Product group : Blend

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Industrial
For professional use only
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
info@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.
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
EUH-statements : EUH208 - Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate(93882-40-7).
May produce an allergic reaction.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified.	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3	15 - 40	Asp. Tox. 1, H304
Reaction products of benzeneamine, N-phenyl- with nonene (branched)	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	1 - 2,49	Aquatic Chronic 4, H413
2,5-bis(tert-nonyldithio)-1,3,4-thiadiazole	(CAS-No.) 89347-09-1 (EC-No.) 289-493-3	1 - 2,49	Aquatic Chronic 3, H412
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	(CAS-No.) 93882-40-7 (EC-No.) 299-434-3	0,1 - 0,99	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
3-(decyloxy)tetrahydrothiophene 1,1-dioxide	(CAS-No.) 18760-44-6 (EC-No.) 242-556-9	0,1 - 0,49	Aquatic Chronic 2, H411
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts	(CAS-No.) 84605-29-8 (EC-No.) 283-392-8 (REACH-no) 01-2119493626-26	0,1 - 0,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich	(CAS-No.) 398141-87-2 (EC-No.) 800-172-4	0,1 - 0,249	Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts	(CAS-No.) 84605-29-8 (EC-No.) 283-392-8 (REACH-no) 01-2119493626-26	(6,25 =<C < 100) Skin Irrit. 2, H315 (10 =<C < 12,5) Eye Irrit. 2, H319 (12,5 =<C < 100) Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General	: Not expected to present a significant hazard under anticipated conditions of normal use. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
After inhalation	: Not required. Assure fresh air breathing. Allow the victim to rest.
After skin contact	: Wash with plenty of soap and water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
After eye contact	: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
After ingestion	: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical 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. Not expected to present a significant hazard under anticipated conditions of normal use.
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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	: Foam. Powder. Carbon dioxide (CO ₂). Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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Other information : Exercise caution when fighting any chemical fire. Use water spray/stream to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Keep away from sources of ignition - No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not release in groundwater, surfacewater or sewerage. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

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). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Can be slippery on hard, smooth walking area.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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. Keep away from food, drink and animal feedingstuffs. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands before breaks and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep only in the original container in a cool, well-ventilated place.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : ≤ 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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EU	IOELV TWA (mg/m ³)	5 mg/m ³
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Additional information : Based on ACGIH TLV, a concentration of 5 mg/m³ oilspray (TWA, 8 hour workday) is recommended.

8.2. Exposure controls

Technical measures:

Provide adequate ventilation.

Personal protective equipment:

Gloves. Safety glasses.

Hand protection:

None under normal use. In case of repeated or prolonged contact wear gloves. Wear protective gloves.

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

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Respiratory protection:

Not necessary with sufficient ventilation. Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily.
Colour	: red.
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	: > 160 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 856 g/l
Solubility	: Water: Negligible.
Log Pow	: No data available
Viscosity, kinematic	: 37 mm ² /s 40C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1 - 6 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

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Acute toxicity (inhalation) : Not classified
Additional information : Elevated temperatures or mechanical action can irritate the nose, throat and lungs.
Low order of acute / systemic toxicity.

Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

LD50 oral rat	3600 mg/kg OECD 401
LD50 dermal rat	20000 mg/kg OECD 402

Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified. (64742-55-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

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)

2,5-bis(tert-nonyldithio)-1,3,4-thiadiazole (89347-09-1)

LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	2,75 mg/l/4h

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

LD50 oral	> 10000 mg/kg
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Skin corrosion/irritation : Not classified
Additional information : Repeated or prolonged skin contact may cause irritation
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Additional information : Entering the lungs by ingestion or vomiting may cause severe lung damage.
Based on available data, the classification criteria are not met

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Viscosity, kinematic	37 mm ² /s 40C
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Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

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Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

LC50 fish 1	4,5 mg/l Oncorhynchus mykiss
LC50 fish 2	46 mg/l Cyprinodon variegatus
EC50 Daphnia 1	23 mg/l
EC50 Daphnia 2	0,8 mg/l @21d
EC50 other aquatic organisms 2	10000 mg/l @0.1d - Chlorophyta
EC50 72h algae (1)	21 mg/l @3d - Chlorophyta
NOEC (acute)	1,8 mg/l @4d - Oncorhynchus mykiss
NOEC (chronic)	10 mg/l @2d - Daphnia
NOEC chronic fish	0,4 mg/l @21d - Daphnia
NOEC chronic algae	10 mg/l @3d - Chlorophyta

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

LC50 fish 1	> 100 mg/l @ 96h
LC50 other aquatic organisms 1	600 mg/l @ 72h (Algea)
EC50 Daphnia 1	51 mg/l @ 48h
EC50 72h algae (1)	> 100 mg/l
NOEC chronic algae	33 mg/l @ 96h

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

LC50 fish 1	1000 mg/l OECD 203
LC50 fish 2	> 0,17 mg/l OECD 203
LC50 other aquatic organisms 1	0,062 mg/l OECD 202 Daphnia 1
LC50 other aquatic organisms 2	> 100 mg/l OECD 201

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable. May cause long-term adverse effects in the environment.
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Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

Persistence and degradability	Poorly biodegradable.
Biodegradation	1,5 % @28d OECD TG 301 B

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

Persistence and degradability	Poorly biodegradable.
Biodegradation	0 % Sturm-test @28d

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

Biodegradation	11 - 14 % OECD 301
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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkoxy)derivs., C10-rich (398141-87-2)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

Log Kow	0,56 Measurements
Bioaccumulative potential	not bioaccumulable.

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

Bioconcentration factor (BCF REACH)	1730
Log Kow	3,6 @0.1d
Bioaccumulative potential	Moderate bioconcentration.

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

Bioconcentration factor (BCF REACH)	410 @OECD 305
Bioaccumulative potential	not bioaccumulable.

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

Bioaccumulative potential	Expected to bio accumulate.
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12.4. Mobility in soil

Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

Soil	No information available.
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Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)

Log Koc	> 2000
Soil	Low mobility (soil).

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

Soil	Adsorbs into the soil.
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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

Soil	Adsorbs into the soil.
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12.5. Results of PBT and vPvB assessment

Component

Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Waste disposal according to official state regulations.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove to an authorized waste treatment plant.
Waste materials	: Avoid release to the environment.

SECTION 14: Transport information

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

ADR	IMDG
14.1. UN number	
Not applicable	Not applicable

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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 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.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

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
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways.

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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.
EUH208	Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate(93882-40-7). May produce an allergic reaction.

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