



2-Stroke Gear Oil 10W-40 Semi-Synthetic Safety Data Sheet

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

Date of issue: 8-4-2011 Revision date: 29-4-2015 version: 3.1

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

1.1. Product identifier

Product name : 2-Stroke Gear Oil 10W-40 Semi-Synthetic

Product code : 53000

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

Use of the substance/mixture : Automotive care products

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)

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, Centre Hospitalier Universitaire de Constantine	Avonley Road SE14 5ER London	0870 243 2241	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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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 - 15	Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]	(CAS No) 64742-65-0 (EC No) 265-169-7 (EC Index No) 649-474-00-6 (REACH-no) 01-2119471299-27	1 - 2,5	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified.	(CAS No) 64742-55-8 (EC No) 265-158-7 (EC Index No) 649-468-00-3	1 - 2,5	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	0,1 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 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 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 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	: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).
After inhalation	: Not required.
After skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
After eye contact	: Wash immediately with lots of water.
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/injuries	: In case of accident or if you feel unwell, seek medical advice immediately (show this label if possible).
After inhalation	: None under normal use.
After skin contact	: Contact during a long period may cause light irritation.
After eye contact	: May cause slight irritation.
After ingestion	: Harmful: may cause lung damage if swallowed.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Although this substance has flammability data, it is difficult to ignite in air and is classified as non-flammable.
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5.3. Advice for firefighters

Other information	: Use water spray/stream to protect personnel and to cool endangered containers.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

Avoid release to the environment. Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : < 50 °C

Storage area : Ensure adequate ventilation of the storage area. Keep container tightly closed and dry.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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:

If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured.

Materials for protective clothing:

Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications. Suitable material: nitrile rubber

Hand protection:

Wear suitable gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily.
Colour	: Yellowbrown.
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

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Flash point	: > 220 °C ASTM D 92
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	: 876 g/l
Solubility	: Slightly soluble, the product remains on the water surface.
Log Pow	: No data available
Viscosity, kinematic	: 100 mm ² /s
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 use.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

Oxidizing substances. Acids and bases.

10.6. Hazardous decomposition products

On burning: release of harmful/irritant gases/vapours e.g.: carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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
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), solvent-dewaxed heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LD50 oral	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	5,53 mg/l/4h
Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified. (64742-55-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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

Distillates (petroleum), solvent-dewaxed heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day
NOAEL (inhalation, rat, dust/mist/fume, 90 days)	> 980 mg/l/6h/day
NOAEL (subchronic, oral, animal/male, 90 days)	>= 2000 mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	>= 2000 mg/kg bodyweight

Aspiration hazard : Not classified

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Viscosity, kinematic	100 mm ² /s
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SECTION 12: Ecological information

12.1. Toxicity

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

LC50 fish 1	4,5 ml/l OECD 203 (oncorhynchus 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)

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

LC50 fish 1	46 mg/l @ 96 h
EC50 Daphnia 1	23 mg/l @ 48 h
EC50 other aquatic organisms 1	2 mg/l @ 96 h Algae
NOEC (acute)	< 0,1 mg/l @ 48 h Daphnia magna

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable.
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Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)

Biodegradation	1,5 % OECD 301B 28d
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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

12.3. Bioaccumulative potential

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

Log Pow	0,9 @ 23C
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Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)

Bioconcentration factor (BCF REACH)	< 100
Log Kow	0,6
Bioaccumulative potential	not bioaccumulable.

Distillates (petroleum), solvent-dewaxed heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

Log Pow	> 3
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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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12.5. Results of PBT and vPvB assessment

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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.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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.
European List of Waste (LoW) code : 13 02 00 - Waste engine, gear and lubricating oils. 13 02 05- Mineral-based non-chlorinated engine, gear and lubricating oils. 15 01 10 Packaging containing residues of or contaminated by dangerous substances

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
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

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1

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Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

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