



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
Issue date: 8-4-2011 Revision date: 27-11-2020 Supersedes: 26-10-2020 version: 3.4

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 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]

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

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Base oil - not specified	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	10 – 24	Asp. Tox. 1, H304

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bis(nonylphenyl)amine	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	1 – 2,4	Aquatic Chronic 4, H413
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	(CAS-No.) 93819-94-4 (EC-No.) 298-577-9 (EC Index-No.) 272-028-3 (REACH-no) 01-21419543726-33	0,1 – 0,99	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

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 (EC Index-No.) 272-028-3 (REACH-no) 01-21419543726-33	(6,25 ≤C < 100) Skin Irrit. 2, H315 (10 ≤C < 12,5) Eye Irrit. 2, H319 (12,5 ≤C < 100) Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation	: Not required.
After skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
After eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes.
After ingestion	: If swallowed, seek medical advice immediately and show this container or label. Rinse mouth out with water. Do not induce vomiting.

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

After inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
After skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
After eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
After ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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	: water spray, powder, foam and CO ₂ .
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No additional information available.
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5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing and gloves.
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6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing and gloves.
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6.2. Environmental precautions

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	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Alkaline cleaner. Sand or other absorbent.
Other information	: Spill area may be slippery.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.
- Handling temperature : < 40 °C
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

- Storage temperature : < 40 °C
- Storage area : Store in a closed container. Keep 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

Base oil - not specified (64742-54-7)

EU	IOELV TWA (mg/m³)	5 mg/m³ 8 h/day
Germany	TRGS 910 Acceptable concentration notes	

Additional information : Based on ACGIH TLV, a concentration of 5 mg/m³ oil spray (TWA, 8 hour workday) is recommended.

8.2. Exposure controls

Technical measures:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Safety glasses.

Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

Hand protection:

Wear suitable gloves resistant to chemical penetration

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR)	6 (> 480 minutes)	>0,35		

Eye protection:

Safety goggles

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

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 : 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

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °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	: 854 g/l
Solubility	: Slightly soluble, the product remains on the water surface.
Log Pow	: No data available
Viscosity, kinematic	: 95 mm ² /s
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of 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 conditions.

10.5. Incompatible materials

Oxidizing agent. acids and bases.

10.6. Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, nitrogen oxides (NO_x), sulphur compounds.

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

Base oil - not specified (64742-54-7)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg
LC50 Inhalation - Rat	> 5 mg/l/4h

bis(nonylphenyl)amine (36878-20-3)

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

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
LD50 dermal rabbit	> 3160 mg/kg bodyweight OECD 402
LC50 Inhalation - Rat	> 2 mg/l > 2 ml 1h OECD 403 read across

Skin corrosion/irritation	: Not classified
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Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Base oil - not specified (64742-54-7)

NOAEL (dermal, rat/rabbit)	> 2000 mg/kg bodyweight
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STOT-repeated exposure	: Not classified
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Base oil - not specified (64742-54-7)

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight OECD 408
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight/day
NOAEL (subacute, oral, animal/male, 28 days)	> 220 mg/kg bodyweight
NOAEL (subchronic, oral, animal/male, 90 days)	> 980 mg/kg bodyweight

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

LOAEL (dermal, rat/rabbit, 90 days)	≈ 70 mg/kg bodyweight OECD 410
NOAEL (oral, rat, 90 days)	160 mg/kg bodyweight OECD 422

Aspiration hazard	: Not classified
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Viscosity, kinematic	95 mm²/s
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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Base oil - not specified (64742-54-7)

LC50 fish 1	> 100 mg/l @Pimephales promelas
EC50 Daphnia 1	> 10000 mg/l
EC50 Daphnia 2	> 10 mg/l @21D
EC50 72h algae (1)	> 100 mg/l @Scenedesmus quadricauda 3D
NOEC chronic fish	> 10 mg/l @21 D

bis(nonylphenyl)amine (36878-20-3)

LC50 fish 1	> 100 mg/l OECD 203 (Danio rerio @ 96h
EC50 Daphnia 1	> 100 mg/l OECD 202 Daphnia magna
EC50 72h algae (1)	> 100 mg/l Desmodesmus subspicatus
EC50 72h algae (2)	> 100 mg/l Desmodesmus subspicatus
EC50 96h algae (1)	870 mg/l Pseudokirchneriella subcapitata

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
LC50 other aquatic organisms 1	2,1 ppm OECD 201 (Selenastrum capricornutum) 48h
EC50 Daphnia 1	5,4 ml/l OECD 202 (Daphnia magna) 48h
EC50 72h algae (1)	2,1 mg/l Selenastrum capricornutum UTEX 1648

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EC50 72h algae (2)	2 mg/l Selenastrum capricornutum UTEX 1648
EC50 96h algae (1)	2,1 mg/l Selenastrum capricornutum UTEX 1648
EC50 96h algae (2)	2 mg/l Selenastrum capricornutum UTEX 1648

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable.
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Base oil - not specified (64742-54-7)

Biodegradation	31 % @28D -OECD TG 301 B
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bis(nonylphenyl)amine (36878-20-3)

Persistence and degradability	Not readily biodegradable.
Biodegradation	1 % @28d

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

Biodegradation	1,5 % OECD 301B 28d
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12.3. Bioaccumulative potential

bis(nonylphenyl)amine (36878-20-3)

Log Pow	> 7,6
Bioaccumulative potential	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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12.4. Mobility in soil

bis(nonylphenyl)amine (36878-20-3)

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

Soil	Adsorbs into the soil.
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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) : Disposal must be done according to official regulations.

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

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14.5. Environmental hazards

Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
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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.

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

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
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
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
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.