



MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 22/12/2011 Revision date: 21/06/2024 Supersedes: 03/03/2023 version: 18.0

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

1.1. Product identifier

Product form : Mixture
Trade name : MPM Lithium Grease EP00/000
UFI : 3CRV-S02J-G00C-F19Y
Product code : 64000
Type of product : Fats and Oils
Product group : Blend

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

Relevant identified uses

Main use category : Professional use, Industrial use
Industrial/Professional use spec : Non-dispersive use
Use of the substance/mixture : Manual activities involving hand contact
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

Manufacturer

MPM International Oil Company BV
Cyclotronweg 1
NL 2629 HN Delft, Zuid Holland
Nederland
T +31 (0)15 2514030 (08.00 - 17.00 GMT+1)
info@mpmoil.com, www.mpmoil.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, H412
Category 3
Full text of H- and EUH-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]

Hazard pictograms (CLP) :



GHS07

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

CLP Signal word	: WARNING.
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P102 - Keep out of reach of children. P262 - Do not get in eyes, on skin, or on clothing. P273 - Avoid release to the environment. P280 - Wear protective gloves, face protection. P501 - Dispose of contents/container in accordance with local and national regulations.
EUH-statements	: EUH208 - Contains: Dihydro-3-(tetrapropenyl)furan-2,5-dione, Phosphoric acid ester amine salt. May produce an allergic reaction.
Extra phrases	: For professional users only.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7), (Z)-octadec-9-enylamine (112-90-3), Phosphoric acid ester amine salt
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7), (Z)-octadec-9-enylamine (112-90-3), Phosphoric acid ester amine salt

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7), Phosphoric acid ester amine salt, (Z)-octadec-9-enylamine (112-90-3)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dihydro-3-(tetrapropenyl)furan-2,5-dione	CAS-No.: 26544-38-7 EC-No.: 247-781-6 REACH-no: 01-2119979080-37	$\geq 0.1 - \leq 1$	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 4, H413
Phosphoric acid ester amine salt	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	$\geq 0.1 - \leq 1$	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
(Z)-octadec-9-enylamine	CAS-No.: 112-90-3 EC-No.: 204-015-5 EC Index-No.: 612-283-00-3	$\geq 0.1 - \leq 0.25$	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phosphoric acid ester amine salt	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	(9.39 ≤ C < 100) Skin Sens. 1; H317 (50 ≤ C < 100) Eye Dam. 1; H318 (50 ≤ C < 100) Eye Irrit. 2; H319

Comments : This product does not contain substances that may be of very high concern at a concentration ≥ 0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation : Not required.
After skin contact : Wash skin with mild soap and water.
After eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes.
After ingestion : Do NOT induce vomiting. Rinse mouth out with water. Get immediate medical advice/attention.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, powder, foam and CO₂.
Unsuitable extinguishing media : 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

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

General measures : If spilled, may cause the floor to be slippery.

For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Emergency procedures : Do not breathe vapours.

For emergency responders

Protective equipment : Wear suitable protective clothing and gloves. Safety glasses.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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 : Detergent. Clean up any spills as soon as possible, using an absorbent material to collect it.

Other information : Spill area may be slippery. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Handling temperature : < 20 °C

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a closed container.

Storage conditions : Keep container closed when not in use.

Storage temperature : ≤ 20 °C

Storage area : Store in dry, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

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

8.2. Exposure controls

Appropriate engineering controls

Technical measures:

No additional information available.

Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety goggles

Skin protection

Skin and body protection:

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

Hand protection:

Protective gloves

Respiratory protection

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	: Solid
Colour	: Dark brown.
Appearance	: Paste.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: > 170 °C
Freezing point	: > 170 °C
Boiling point	: > 300 °C
Flammability (solid, gas)	: Not available
Explosive properties	: No data available.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: > 200 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Slightly soluble, the product remains on the water surface.
Log Kow	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 886 kg/m ³ @ 25°C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No naked flames, sparks, and do not smoke.

10.5. Incompatible materials

Strong oxidizing agent. Acids and bases.

10.6. Hazardous decomposition products

On combustion, forms: carbon oxides (CO and CO₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Additional information	: May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged contact with the skin can cause allergic reactions in sensitive individuals. (based on components).***

Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

LD50 oral rat	2900 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5.3 mg/l/4h
ATE CLP (oral)	2900 mg/kg bodyweight
ATE CLP (dust,mist)	5.3 mg/l/4h

Phosphoric acid ester amine salt

ATE CLP (oral)	500 mg/kg bodyweight
Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

(Z)-octadec-9-enylamine (112-90-3)

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified

(Z)-octadec-9-enylamine (112-90-3)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Phosphoric acid ester amine salt

NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day @28d (OECD 407)
Aspiration hazard	: Not classified

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Viscosity, kinematic	0.428 mm²/s
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11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Other information

Potential adverse human health effects and symptoms : According to the Preparation Directive 1999/45/EC this product is classified as not dangerous. This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

SECTION 12: Ecological information

12.1. Toxicity

General : Based on available data, the classification criteria are not met.
Ecology - water : 0% of the mixture consists of component(s) of unknown hazard to the aquatic environment.
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.

Phosphoric acid ester amine salt

LC50 fish 1	24 mg/l @4d Oncorhynchus mykiss
LC50 fish 2	8.5 mg/l Pimephales promelas @4d
EC50 Daphnia 1	91.4 mg/l Daphnia magna
EC50 72h - Algae [1]	6.4 mg/l Selenastrum capricornutum
NOEC chronic fish	3.2 mg/l Oncorhynchus mykiss @4d
NOEC chronic crustacea	0.12 mg/l Daphnia magna @2d
NOEC chronic algae	1.7 mg/l Selenastrum capricornutum @4d

12.2. Persistence and degradability

MPM Lithium Grease EP00/000

Persistence and degradability	Rapidly degradable
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Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Persistence and degradability	Rapidly degradable
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(Z)-octadec-9-enylamine (112-90-3)

Persistence and degradability	Rapidly degradable
Biodegradation	66 % OECD 301B @ 28d

Phosphoric acid ester amine salt

Persistence and degradability	Rapidly degradable
BOD (% of ThOD)	3.6 % ThOD @28d inherent sediment
Biodegradation	7.4 % Sturm (28d) OECD TG 301B

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

MPM Lithium Grease EP00/000	
Results of PBT assessment	This mixture does not contain substances considered to be persistent, bioaccumulative or toxic (PBT). This mixture contains no substances considered as being very persistent or very bioaccumulative (vPvB).
Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7), (Z)-octadec-9-enylamine (112-90-3), Phosphoric acid ester amine salt
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7), (Z)-octadec-9-enylamine (112-90-3), Phosphoric acid ester amine salt

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The product does not contain any substances with endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : This material and its container must be disposed of in a safe way, and as per local legislation.
European List of Waste (LoW, EC 2000/532) : 20 01 26* - oil and fat other than those mentioned in 20 01 25

SECTION 14: Transport information

In accordance with ADR / IMDG

ADR	IMDG
14.1. UN number or ID number	
Not regulated for transport	
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	

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Supersedes	Modified
	Revision date	Modified
	Comments (below composition)	Added
	Display additional SDS EU addresses	Added
1.1	UFI on SDS 1.1	Added

MPM Lithium Grease EP00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Indication of changes		
Section	Changed item	Comments
2.2	Precautionary statements (CLP)	Modified
2.2	EUH-statements	Added
3	Composition/information on ingredients	Modified

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains: Dihydro-3-(tetrapropenyl)furan-2,5-dione, Phosphoric acid ester amine salt. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.