



MPM Lithium Grease EP-00/000

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 22-12-2011 Revision date: 21-6-2024 Supersedes: 3-3-2023 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 EP-00/000
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

1.2.1. Relevant identified uses

Main use category : Professional use, Consumer 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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

MPM International Oil Company BV
Cyclotronweg 1
2629 HN Delft - Nederland
T +31 (0)15 2514030
info@mpmoil.com - www.mpmoil.com

1.4. Emergency telephone number

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

Country	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)	
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+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]

Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: see section 16

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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

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

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 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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
(Z)-octadec-9-enylamine	CAS-No.: 112-90-3 EC-No.: 204-015-5 EC Index-No.: 612-283-00-3	$\geq 0,1 - \leq 1$	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)
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

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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.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.
Emergency procedures : Do not breathe vapours.

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6.1.2. 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

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

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

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures:

No additional information available.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety goggles

8.2.2.2. Skin protection

Skin and body protection:

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

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

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	: Not available
Explosive properties	: No data available.
Explosive limits	: Not applicable
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

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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
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

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 (Based on available data, the classification criteria are not met.)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met.)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met.)
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

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

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
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Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.)
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)

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

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met.)

(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)
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Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

11.2. Information on other hazards

11.2.1. 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 %
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11.2.2. 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].
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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 (Based on available data, the classification criteria are not met.)
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

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Phosphoric acid ester amine salt

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

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

Biodegradation	66 % OECD 301B @ 28d
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Phosphoric acid ester amine salt

BOD (% of ThOD)	3,6 % ThOD @28d inherent sediment
Biodegradation	7,4 % Sturm (28d) OECD TG 301B

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

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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).
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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

14.1. UN number or ID number

UN-No. : Not applicable
UN-No. (IMDG) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable

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14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)
Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations

No additional information available

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	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
	Comments (below composition)	Added	
	Display additional SDS EU addresses	Added	
1.1	UFI on SDS 1.1	Added	
2.2	Precautionary statements (CLP)	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
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 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
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

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.