

#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 21/07/2015 Revision date: 21/06/2024 Supersedes: 03/03/2023 version: 3.0

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

#### 1.1. Product identifier

Product form : Mixture

Trade name : MPM Heavy Duty Lithium Complex Grease Blue EP2/3

UFI : 5YRV-90WA-M00T-3EDE

Product code : 65000HDB

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 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

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

CLP Signal word

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

Hazard pictograms (CLP) :



: WARNING.

Contains : Dihydro-3-(tetrapropenyl)furan-2,5-dione

Hazard statements (CLP) : H317 - May cause an allergic skin reaction.

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Precautionary statements (CLP) : P102 - Keep out of reach of children.

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves, face shield.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362 - Take off contaminated clothing.

P501 - Dispose of contents/container in accordance with local and national regulations.

: For professional users only.

#### 2.3. Other hazards

Extra phrases

Contains no PBT and/or vPvB substances ≥ 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)	
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)	

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 %

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

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

Regulation (EU) 2018/605

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	CAS-No.: 68411-46-1 EC-No.: 270-128-1 REACH-no: 01-2119491299- 23	≥1-≤3	Repr. 2, H361f Aquatic Chronic 3, H412
Dihydro-3-(tetrapropenyl)furan-2,5-dione	CAS-No.: 26544-38-7 EC-No.: 247-781-6 REACH-no: 01-2119979080- 37	≥ 0.1 – ≤ 1	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 4, H413

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.

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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. 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

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#### **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.

#### 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

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

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#### **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 : Blue. Colour Appearance : Paste. Odour : Characteristic. Odour threshold : Not available Melting point : > 240 °C : > 240 °C Freezing point 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 : Not available Decomposition temperature : Not available рΗ pH solution : Not available

: @ 40°C Solubility : Slightly soluble, the product remains on the water surface.

: Not available Log Kow Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : 920 kg/m³ @ 25° C Relative density : Not available Relative vapour density at 20°C : Not applicable Particle size : Not available

#### 9.2. Other information

Viscosity, kinematic

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).

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#### **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

LD50 oral rat > 5000 mg/kg OECD 401

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

Dillydro-5-(tetrapropertyr)ruran-2,5-drone (20044-50-7)		
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	
Oldin and the Berthallow		

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

#### MPM Heavy Duty Lithium Complex Grease Blue EP2/3

Viscosity, kinematic @ 40°C

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

Viscosity, kinematic 0.428 mm<sup>2</sup>/s

#### 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

Hazardous to the aquatic environment, short-term

n : Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

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Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
EC50 72h - Algae [1] 100 mg/l	
NOEC (acute)	10 – 100 mg/l 72h

#### 12.2. Persistence and degradability

MPM Heavy Duty Lithium Complex Grease Blue EP2/3		
Persistence and degradability  Not soluble in water, so only minimally biodegradable.		
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)		
Persistence and degradability Under test conditions no biodegradation observed.		
Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)		
Persistence and degradability Rapidly degradable		

#### 12.3. Bioaccumulative potential

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Bioconcentration factor (BCF REACH)	> 1719

#### 12.4. Mobility in soil

MPM Heavy Duty Lithium Complex Grease Blue EP2/3		
Soil Prevent soil and water pollution.		
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)		
Log Koc > 5730		

#### 12.5. Results of PBT and vPvB assessment

MPM Heavy Duty Lithium Complex Grease Blue EP2/3		
Results of PBT assessment	This mixture does not contain any substances that have been assessed as vPvB / PBT according to Regulation (EC) No, 1907/2006, 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)		
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)		

#### 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

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#### **SECTION 14: Transport information**

In accordance with ADR / IMDG

ADR	IMDG				
14.1. UN number or ID number	14.1. UN number or ID number				
Not regulated for transport					
14.2. UN proper shipping name	14.2. UN proper shipping name				
Not regulated	Not regulated				
14.3. Transport hazard class(es)					
Not regulated Not regulated					
14.4. Packing group					
Not regulated	Not regulated				
14.5. Environmental hazards					
Not regulated Not regulated					
No supplementary information available					

#### 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### 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)

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#### **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**

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
ED	Endocrine disruptor	
EC-No.	European Community number	
vPvB	Very Persistent and Very Bioaccumulative	
SDS	Safety Data Sheet	
TRGS	Technical Rules for Hazardous Substances	
TLM	Median Tolerance Limit	
ThOD	Theoretical oxygen demand (ThOD)	
STP	Sewage treatment plant	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
PBT	Persistent Bioaccumulative Toxic	
OEL	Occupational Exposure Limit	
OECD	Organisation for Economic Co-operation and Development	
NOEC	No-Observed Effect Concentration	
NOAEC	No-Observed Adverse Effect Concentration	
LOAEL	Lowest Observed Adverse Effect Level	
LD50	Median lethal dose	
N.O.S.	Not Otherwise Specified	
NOAEL	No-Observed Adverse Effect Level	
LC50	Median lethal concentration	

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Abbreviations and acronyms:	
IOELV	Indicative Occupational Exposure Limit Value
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
EN	European Standard

Data sources Training advice

Other information

- : Supplier's safety documents. ECHA (European Chemicals Agency).
- : Normal use of this product shall imply use in accordance with the instructions on the packaging.
- The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements:		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H361f	Suspected of damaging fertility.	
H412	Harmful to aquatic life with long lasting effects.	
H413	May cause long lasting harmful effects to aquatic life.	
Repr. 2	Reproductive toxicity, Category 2	
Skin Sens. 1A	Skin sensitisation, category 1A	

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.

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