



# MPM MOS-2 grease EP-2

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 03.11.2010 Revision date: 02.11.2022 Supersedes: 12.06.2015 version: 16.0

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : MPM MOS-2 grease EP-2  
Product code : 61000  
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  
Cyclotronweg 1  
2629 HN Delft - Nederland  
T +31 (0)15 2514030  
[info@mpmoil.com](mailto:info@mpmoil.com) - [www.mpmoil.com](http://www.mpmoil.com)

#### 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<br>Beaumont Hospital   | PO Box 1297<br>Beaumont Road<br>9 Dublin | +353 1 809 2566<br>(Healthcare professionals-<br>24/7)<br>+353 1 809 2166 (public,<br>8am - 10pm, 7/7) |         |
| United Kingdom | Guy's & St Thomas' Poisons Unit<br>Medical Toxicology Unit, Guy's & St<br>Thomas' Hospital Trust | Avonley Road<br>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]

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

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]

CLP Signal word : -

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Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (CLP) : P273 - Avoid release to the environment.  
P501 - Dispose of contents/container in accordance with local and national regulations.

### 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 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 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]    |
|------------------------------|---|---------------------|--|
| Tris(methylphenyl) phosphate | CAS-No.: 1330-78-5<br>EC-No.: 809-930-9<br>REACH-no: 01-2119531335-46 | $\geq 0,1 - \leq 1$ | Repr. 2, H361d<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Triphenylphosphate           | CAS-No.: 115-86-6<br>EC-No.: 204-112-2<br>REACH-no: 01-2119457432-41  | $\geq 0,1 - \leq 1$ | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410                   |

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.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, powder, foam and CO<sub>2</sub>.  
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.

##### 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.

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### 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/m<sup>3</sup> oilspray (TWA, 8 hour workday) is recommended.

#### 8.1.5. Control banding

No additional information available.

### 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

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

#### 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.

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### 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                          | : Black.  |
| Appearance                      | : Oily. Paste.  |
| Odour                           | : Characteristic.   |
| Odour threshold                 | : Not available   |
| Melting point                   | : > 180   |
| Freezing point                  | : Not available   |
| Boiling point                   | : > 250 °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                     | : > 210 °C  |
| Auto-ignition temperature       | : Not applicable  |
| Decomposition temperature       | : Not available   |
| pH                              | : Not available   |
| pH solution                     | : Not available   |
| Viscosity, kinematic            | : Not applicable  |
| Viscosity, dynamic              | : No data available.  |
| Solubility                      | : Slightly soluble, the product remains on the water surface. |
| Log Kow                         | : Not available   |
| Vapour pressure                 | : Not available   |
| Vapour pressure at 50°C         | : < 1 hPa   |
| Density                         | : ≈ 900 kg/m <sup>3</sup> @ 20° 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.

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### 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 CO<sub>2</sub>).

## 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

#### Tris(methylphenyl) phosphate (1330-78-5)

|                       |                        |
|-----------------------|------------------------|
| LD50 oral rat         | 3700 mg/kg             |
| LD50 dermal rabbit    | 10000 mg/kg            |
| LC50 Inhalation - Rat | 11,1 mg/l              |
| ATE CLP (oral)        | 3700 mg/kg bodyweight  |
| ATE CLP (dermal)      | 10000 mg/kg bodyweight |
| ATE CLP (vapours)     | 11,1 mg/l/4h           |
| ATE CLP (dust,mist)   | 11,1 mg/l/4h           |

#### Triphenylphosphate (115-86-6)

|                    |   |
|--------------------|---|
| LD50 oral rat      | > 20000 mg/kg bodyweight OECD Guideline 401 |
| LD50 dermal rabbit | > 10000 mg/kg bodyweight OECD Guideline 402 |

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

#### Triphenylphosphate (115-86-6)

|                                     |  |
|-------------------------------------|--|
| NOAEL (dermal, rat/rabbit, 90 days) | 1000 mg/kg bodyweight Guideline: EPA OPPTS 870.3200 @ 21/28 Days |
|-------------------------------------|--|

Aspiration hazard : Not classified

### 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 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 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].

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.  
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.  
Additional information : 0% of the mixture consists of component(s) of unknown hazard to the aquatic environment.

| Tris(methylphenyl) phosphate (1330-78-5) |  |
|--|--|
| LC50 fish 1                              | 0,6 mg/l                                     |
| EC50 Daphnia 1                           | 0,14 mg/l                                    |
| EC50 72h - Algae [1]                     | 0,4 mg/l <i>Desmodesmus subspicatus</i>      |
| NOEC chronic fish                        | 0,01 mg/l 28d ( <i>Oncortynchus mykiss</i> ) |

| Triphenylphosphate (115-86-6) |   |
|-------------------------------|---|
| LC50 fish 1                   | 1,26 mg/l <i>Oryzias latipes</i>  |
| EC50 Daphnia 1                | 2,41 mg/l <i>Daphnia magna</i>  |
| EC50 72h - Algae [1]          | 2,45 mg/l <i>Pseudokirchneriella subcapitata</i> ( <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i> ) |
| EC50 72h - Algae [2]          | 3,73 mg/l <i>Pseudokirchneriella subcapitata</i> ( <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i> ) |
| LOEC (chronic)                | 0,831 mg/l <i>Daphnia magna</i> Duration (21 d)   |
| NOEC (chronic)                | 0,254 mg/l <i>Daphnia magna</i> Duration (@ 21d)  |

### 12.2. Persistence and degradability

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|-------------------------------|--|
| Persistence and degradability | Not soluble in water, so only minimally biodegradable. |

### 12.3. Bioaccumulative potential

No additional information available.

### 12.4. Mobility in soil

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|-----------------------|-----------------------------------|
| Soil                  | Prevent soil and water pollution. |

### 12.5. Results of PBT and vPvB assessment

No additional information available.

### 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.

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### 12.7. Other adverse effects

No additional information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
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 2150/2002) : 16 03 06 - organic wastes other than those mentioned in 16 03 05

## SECTION 14: Transport information

In accordance with ADR / IMDG

### 14.1. UN number or ID number

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

### 14.2. UN proper shipping name

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

### 14.3. Transport hazard class(es)

**ADR**  
Transport hazard class(es) (ADR) : Not regulated

**IMDG**  
Transport hazard class(es) (IMDG) : Not regulated

### 14.4. Packing group

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

### 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**  
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

#### 15.1.1. EU-Regulations

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



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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  | Added    |          |
|                       | Date of issue   | Added    |          |
|                       | Revision date   | Modified |          |
|                       | Additional information  | Added    |          |
|                       | Type of product   | Modified |          |
| 1.1                   | Product group   | Added    |          |
| 1.1                   | Trade name  | Added    |          |
| 1.2                   | Use of the substance/mixture                                    | Added    |          |
| 1.2                   | Industrial/Professional use spec                                | Added    |          |
| 1.2                   | Main use category   | Modified |          |
| 2.1                   | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Modified |          |
| 2.2                   | Precautionary statements (CLP)                                  | Added    |          |
| 2.2                   | Hazard statements (CLP)   | Added    |          |
| 3                     | Composition/information on ingredients                          | Modified |          |
| 4.1                   | After skin contact  | Modified |          |
| 4.1                   | After inhalation  | Modified |          |
| 4.1                   | After ingestion   | Modified |          |
| 4.1                   | After eye contact   | Modified |          |
| 5.2                   | Explosion hazard  | Added    |          |
| 5.3                   | Firefighting instructions                                       | Added    |          |
| 5.3                   | Other information   | Modified |          |
| 6.3                   | For containment   | Added    |          |
| 6.3                   | Methods for cleaning up   | Modified |          |
| 6.3                   | Other information   | Modified |          |
| 7.2                   | Technical measures  | Modified |          |
| 7.3                   | Specific end uses   | Modified |          |
| 8.2                   | Personal protective equipment                                   | Added    |          |
| 8.2                   | Respiratory protection  | Modified |          |

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| Indication of changes |  |          |          |
|-----------------------|--|----------|----------|
| Section               | Changed item                               | Change   | Comments |
| 8.2                   | Hand protection                            | Modified |          |
| 8.2                   | Skin and body protection                   | Modified |          |
| 9.1                   | Explosive properties                       | Added    |          |
| 9.1                   | Viscosity, kinematic                       | Added    |          |
| 9.1                   | Viscosity, dynamic                         | Added    |          |
| 9.1                   | Melting point                              | Added    |          |
| 9.1                   | Solubility                                 | Modified |          |
| 9.1                   | Physical state                             | Modified |          |
| 9.1                   | Flash point                                | Modified |          |
| 9.1                   | Boiling point                              | Modified |          |
| 9.1                   | Appearance                                 | Modified |          |
| 9.1                   | Density                                    | Modified |          |
| 10.1                  | Reactivity                                 | Modified |          |
| 10.2                  | Chemical stability                         | Modified |          |
| 10.3                  | Possibility of hazardous reactions         | Modified |          |
| 10.4                  | Conditions to avoid                        | Modified |          |
| 10.5                  | Incompatible materials                     | Modified |          |
| 10.6                  | Hazardous decomposition products           | Modified |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 11.1                  | Reason for no classification               | Added    |          |
| 12.1                  | Ecology - water                            | Modified |          |
| 13.1                  | European List of Waste (LoW, EC 2150/2002) | Added    |          |
| 13.1                  | Waste disposal recommendations             | Modified |          |

| Full text of H- and EUH-statements |   |
|------------------------------------|---|
| 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 3                  | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| H361d                              | Suspected of damaging the unborn child                            |
| H400                               | Very toxic to aquatic life.                                       |

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| Full text of H- and EUH-statements |   |
|------------------------------------|---|
| H410                               | Very toxic to aquatic life with long lasting effects. |
| H412                               | Harmful to aquatic life with long lasting effects.    |
| Repr. 2                            | Reproductive toxicity, Category 2                     |

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.