

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 19-8-2014 Revision date: 2-7-2024 Supersedes: 4-4-2024 version: 4.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: MPM Engine Flush
UFI	: GQ0U-NSDC-S10F-C2U1
Product code	: AD14000
Type of product	: Additives
Product group	: Mixture

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

1.2.1. Relevant identified uses

Main use category Industrial/Professional use spec

 Professional use,Consumer use,Industrial use
 Non-dispersive use Used in closed systems
 Lubricants and additives

Function or use category

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]

Not classified

Adverse physicochemical, human health and environmental effects

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2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Precautionary statements (CLP) EUH-statements	 P102 - Keep out of reach of children. EUH208 - Contains: C14-16-18 Alkylphenol. May produce an allergic reaction. EUH210 - Safety data sheet available on request.
2.3. Other hazards	

Other hazards not contributing to the classification : Combustible liquids.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT and/or vPvB substances ≥ 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

Comments

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic, Baseoil	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 474-00-6 REACH-no: 01-2119471299- 27	≥ 75 – ≤ 100	Asp. Tox. 1, H304
C14-16-18 Alkylphenol	CAS-No.: 1190625-94-5 EC-No.: 931-468-2 REACH-no: 01-2119498288- 19	< 0,25	Skin Sens. 1B, H317 STOT RE 2, H373

Comments

 The classification as carcinogenic does not qualify because the substance contains less than 3% DMSO extract as measured according to IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method' (CLP, Annex VI, note L).
 UVCB = Substances of unknown or variable composition, complex reaction products or biological materials."

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
After inhalation After skin contact After eye contact After ingestion	 Not required. Wash skin with mild soap and water. In case of eye contact, immediately rinse with clean water for 10-15 minutes. Do NOT induce vomiting. Rinse mouth out with water. Get immediate medical advice/attention.

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4.2. Most important symptoms a	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 Unsuitable extinguishing media	Water spray, powder, foam and CO2.Do not use a heavy water stream.
5.2. Special hazards arising from the su	ubstance or mixture
No additional information available	
5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	 Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release	measures
6.1. Personal precautions, protect	ive equipment and emergency procedures
General measures	: If spilled, may cause the floor to be slippery.
6.1.1. For non-emergency personnel	
Protective equipment Emergency procedures	Gloves. Safety glasses.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 contain	ment 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 Other information	 Detergent. Clean up any spills as soon as possible, using an absorbent material to collect it Spill area may be slippery. Use suitable disposal containers.
6.4. Reference to other sections	

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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	: <40 °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, includ	ling any incompatibilities
Technical measures Storage conditions Storage temperature Storage area	 Store in a closed container. Keep container closed when not in use. ≤ 40 °C 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/m3 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

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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					
Туре	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

8.2.3. Environmental exposure controls

SECTION 9: Physical and chem	ical properties
9.1. Information on basic physical a	
Physical state	: Liquid.
Colour	: Not available
Appearance	: Oily liquid.
Odour	Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
_ower explosion limit	: Not available
Jpper explosion limit	: Not available
Flash point	: > 200 °C @ ASTM D92
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
ьН	: Not available
/iscosity, kinematic	: 32 mm²/s @ 40°C
Solubility	: Insoluble.
Log Kow	: Not available
/apour pressure	: Not available
/apour pressure at 50°C	: Not available
Density	: 873 kg/m³ @ 15°C
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

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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

None under normal conditions.

SECTION 11: Toxicological information			
11.1. Information on hazard classes as def	ined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) 		
C14-16-18 Alkylphenol (1190625-94-5)			
LD50 oral rat	2000 mg/kg		
LD50 dermal rat	2000 mg/kg		
ATE CLP (oral)	2000 mg/kg bodyweight		
ATE CLP (dermal)	2000 mg/kg bodyweight		
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure C14-16-18 Alkylphenol (1190625-94-5)	 Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) 		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met.)		

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MPM Engine Flush	
Viscosity, kinematic	32 mm²/s @ 40°C
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 %

11.2.2. Other information

SECTION 12: Ecological information	
12.1. Toxicity	
•	Not classified (Based on available data, the classification criteria are not met.)
(acute) Hazardous to the aquatic environment, long-term : (chronic)	Not classified (Based on available data, the classification criteria are not met.)
C14-16-18 Alkylphenol (1190625-94-5)	
EC50 Daphnia 1	100 mg/l Daphnia magna
12.2. Persistence and degradability	
MPM Engine Flush	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
MPM Engine Flush	
Soil	Prevent soil and water pollution.
12.5. Results of PBT and vPvB assessment	
MPM Engine Flush	
This substance/mixture does not meet the PBT criteria	a of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criter	ia of REACH regulation, annex XIII
12.6. Endocrine disrupting properties	
Adverse effects on the environment caused by	The product does not contain any substances with endocrine disrupting properties

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

12.7. Other adverse effects

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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)	: 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils	

SECTION 14: Transport information	
In accordance with ADR / IMDG	
14.1. UN number or ID number	
UN-No. UN-No. (IMDG)	: Not regulated : Not regulated
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG)	: Not regulated : 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) Packing group (IMDG)	: Not regulated : Not regulated
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant Other information	 No 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)

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

 $\label{eq:contains} \mbox{ contains no substance} (s) \mbox{ listed on REACH Annex XIV (Authorisation List)}$

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)

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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

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 disrupting properties		
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		
РВТ	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		
IOELV	Indicative Occupational Exposure Limit Value		

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Abbreviations and acronyms	
ΙΑΤΑ	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
EN	European Standard

Data sources Training advice : Supplier's safety documents. ECHA (European Chemicals Agency).

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information

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	
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains: C14-16-18 Alkylphenol. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, 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.