MPM Complete Diesel System Treatment

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 13-8-2014 Revision date: 14-2-2023 Supersedes: 2-12-2022 version: 3.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	MPM Complete Diesel System Treatment
UFI	:	CP3K-U5M2-U00S-N9F9
Product code	:	AD06000
Type of product	:	Additives
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 Used in closed systems
Function or use category	:	Fuel additives

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

MPM International Oil Company
Cyclotronweg 1
2629 HN Delft - Nederland
T +31 (0)15 2514030
info@mpmoil.nl - 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 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)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+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]

Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

Full text of H-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) :

GHS08

CLP Signal word : Danger.

Contains : Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P405 - Store locked up.
P301+P310+P331 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER. Do NOT induce vomiting.
P273 - Avoid release to the environment.
P501 - Dispose of contents/container in accordance with local and national regulations.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This mixture does not contain any substances that have been assessed as vPvB / PBT according to Regulation (EC) No, 1907/2006, 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]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.	EC-No.: 918-481-9 REACH-no: 01-2119457273-39	≥ 50 – ≤ 100	Asp. Tox. 1, H304
2-Ethylhexyl, Nitrate	CAS-No.: 27247-96-7 EC-No.: 248-363-6 REACH-no: 01-2119539586-27	≥ 5 – ≤ 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
2-Ethylhexanol	CAS-No.: 104-76-7 EC-No.: 203-234-3 REACH-no: 01-2119487289-20	< 1	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General : Remove the victim away from contaminated area.

After inhalation : Remove person to fresh air and keep comfortable for breathing.

After skin contact	:	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
After eye contact	:	Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
After ingestion	:	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Aspiration hazard. Go into open air and ventilate suspected area.

4.2. Most important symptoms and effects, both acute and delayed

After inhalation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
After skin contact	:	Repeated exposure may cause skin dryness or cracking.
After eye contact	:	Causes eye irritation.
After ingestion	:	Aspiration hazard. Ingestion may cause nausea, vomiting and diarrhea. Entering the lungs by ingestion or vomiting may cause severe lung damage.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms of respiratory complications (lung oedema) may occur several hours after.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Powder, alcohol-resistant foam, water spray, carbon dioxide.
Unsuitable extinguishing media	:	High power water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Precautionary measures fire	:	Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	:	Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Use a water spray to cool exposed surfaces and to protect fire-fighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Remove ignition sources. Do not breathe gas/fumes/vapour/spray. Ensure adequate ventilation.

6.1.1. For non-emergency personnel

No additional information available.

6.1.2. For emergency responders

No additional information available.

6.2. Environmental precautions

Avoid release to the environment. 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	:	Absorb spillage to prevent material damage.

6.4. Reference to other sections

Information on personal protective equipment - see Chapter 8. Information on disposal - see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Provide adequate ventilation to minimize dust and/or vapour concentrations. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

Hygiene measures : Avoid all unnecessary exposure. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep only in the original container in a cool, well-ventilated place.

Storage conditions : Keep container tightly closed. Keep cool. Store in a dry place.

Information on mixed storage : May react violently with oxidants.

Storage area : Store according to local legislation.

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

2-Ethylhexyl, Nitrate (27247-96-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOELV TWA (mg/m³)	5,4 mg/m³ long term value
IOELV TWA (ppm)	1 ppm long term value
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m³)	5,4 mg/m³ long term value
WEL TWA (ppm)	1 ppm long term value

2-Ethylhexanol (104-76-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-ethylhexan-1-ol
IOELV TWA (mg/m³)	5,4 mg/m³
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Ireland - Occupational Exposure Limits	
Local name	2-Ethylhexan-1-ol
OEL (8 hours ref) (mg/m³)	5,4 mg/m³
OEL (8 hours ref) (ppm)	1 ppm
Notes (IE)	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	2-ethylhexan-1-ol
WEL TWA (mg/m³)	5,4 mg/m³
WEL TWA (ppm)	1 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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 : Lists that were valid at the time of compilation serve as the basis.

8.1.5. Control banding

No additional information available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures:
If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

8.2.2. Personal protection equipment

Personal protective equipment:
High gas/vapour concentration: gas mask with filter type AX. 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:
[In case of inadequate ventilation] wear respiratory protection.

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	:	Liquid
Colour	:	Amber.
Odour	:	Characteristic.
Odour threshold	:	Solvent

Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable.
Explosive properties	:	Flammable or explosive vapour/air mixtures may be formed. Product is not explosive.
Oxidising properties	:	No oxidising properties.
Explosive limits	:	0,6 – 7 vol %
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	> 61 °C
Auto-ignition temperature	:	Could burn but do not ignite readily
Decomposition temperature	:	> 200
pH	:	Not determined.
Viscosity, kinematic	:	< 7 mm²/s (40°C)
Viscosity, dynamic	:	Not determined.
Solubility	:	Material insoluble in water.
Log Kow	:	Not available
Vapour pressure	:	1 hPa
Vapour pressure at 50°C	:	Not available
Density	:	810 kg/m³ @ 20°C
Relative density	:	Not determined.
Relative vapour density at 20°C	:	Not determined.
Relative density of saturated gas/air mixture	:	Not determined.
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

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available.

9.2.2. Other safety characteristics

VOC content : 1,69 % (EU, 1999/13/EC); (USA, EPA Method 24/24A)

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

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

Heat. Risk of explosion by shock, friction, fire or other sources of ignition. Do not breathe vapour/aerosol.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

None under normal conditions.

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

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 4951 mg/m³ @ 4h

2-Ethylhexyl, Nitrate (27247-96-7)	
LD50 oral rat	> 960 ml/kg
LD50 dermal rabbit	4820 µg/kg
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	4,82 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

2-Ethylhexanol (104-76-7)	
LD50 oral rat	2049 mg/kg
LD50 dermal rabbit	1970 mg/kg
LC50 Inhalation - Rat	2,5 mg/l/4h
ATE CLP (oral)	2049 mg/kg bodyweight
ATE CLP (dermal)	1970 mg/kg bodyweight
ATE CLP (vapours)	2,5 mg/l/4h
ATE CLP (dust,mist)	2,5 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met.)
pH: Not determined.
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met.)
pH: Not determined.
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met.)
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.)

2-Ethylhexanol (104-76-7)	
NOAEL (chronic, oral, animal/male, 2 years)	750 mg/kg bodyweight

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.)

2-Ethylhexanol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.

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

2-Ethylhexyl, Nitrate (27247-96-7)	
NOAEL (dermal, rat/rabbit, 90 days)	500 mg/kg bodyweight EPA OPP 82-2 (21/28 D)

2-Ethylhexanol (104-76-7)	
NOAEC (inhalation, rat, gas, 90 days)	120 ppm OECD Guideline 413

Aspiration hazard : May be fatal if swallowed and enters airways.

MPM Complete Diesel System Treatment	
Viscosity, kinematic	< 7 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 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 %

11.2.2. Other information

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.	
LC50 fish 1	> 100 mg/l @96h Oncorhynchus mykiss
EC50 Daphnia 1	> 100 mg/l @48h Daphnia magna
EC50 other aquatic organisms 1	> 100 mg/l @72h Pseudokirchneriella subcapitata

2-Ethylhexyl, Nitrate (27247-96-7)	
LC50 fish 1	2 mg/l @96h fish
EC50 Daphnia 1	> 12,6 mg/l @48h Daphinia magna
EC50 other aquatic organisms 1	> 12,6 mg/l @72h Algae
EC50 72h - Algae [1]	3,22 mg/l pseudokirchneriella subcapitata
EC50 72h - Algae [2]	1,57 mg/l Pseudokirchneriella subcapitata

2-Ethylhexanol (104-76-7)	
LC50 fish 1	17,1 mg/l @96h Leuciscus idus
LC50 fish 2	17,1 mg/l leuciscus idus melanotus
EC50 Daphnia 1	39 mg/l @48h Dapnia magna
EC50 other aquatic organisms 1	11,5 mg/l @72h Algae Scenedesmus subspicatus
EC50 72h - Algae [1]	28,2 mg/l pimephales promelas
EC50 72h - Algae [2]	16,6 mg/l Desmodesmus subspicatus

12.2. Persistence and degradability

2-Ethylhexanol (104-76-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 95 % @5d

12.3. Bioaccumulative potential

MPM Complete Diesel System Treatment	
Bioaccumulative potential	No data available.

2-Ethylhexyl, Nitrate (27247-96-7)	
Bioconcentration factor (BCF REACH)	1332
Log Pow	4,5 – 5,26

2-Ethylhexanol (104-76-7)	
Bioconcentration factor (BCF REACH)	25,33
Log Kow	2,9

12.4. Mobility in soil

MPM Complete Diesel System Treatment	
Soil	No data available.

2-Ethylhexyl, Nitrate (27247-96-7)	
Log Koc	3,8

12.5. Results of PBT and vPvB assessment

MPM Complete Diesel System Treatment
This mixture does not contain any substances that have been assessed as vPvB / PBT according to Regulation (EC) No, 1907/2006, Annex XIII.

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

Other adverse effects : The product contains ecotoxic substances, which can have harmful side effects for aquatic organisms,The product contains substances that can cause undesirable long-term side effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Comply with local regulations for disposal.

Product/Packaging disposal recommendations : Do not dispose of with domestic waste. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste materials : Dispose of contents/container in accordance with licensed collector's sorting instructions and in accordance to local and regional legislation.

European List of Waste (LoW) code : 07 02 15 - wastes from additives other than those mentioned in 07 02 14

HP Code : HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

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)
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)
VOC content : 1,69 % (EU, 1999/13/EC); (USA, EPA Method 24/24A)

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No additional information available.

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	Adverse effects on the environment caused by endocrine disrupting properties	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Adverse health effects caused by endocrine disrupting properties	Added	
	Revision date	Modified	
	Supersedes	Modified	

Full text of H- and EUH-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.