

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 1-3-2019 Revision date: 12-7-2023 Supersedes: 18-6-2020 version: 2.0

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

1.1. Product identifier

Product form : Mixture

Trade name : MPM DCTF Double Clutch Transmission Fluid

Product code : 16000DCTF

Type of product : Other engine, gear and lubricating oils.

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 : Professional use, Consumer use, Industrial use

Industrial/Professional use spec : Non-dispersive use
Used in closed systems

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)	
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]

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) : P102 - Keep out of reach of children.

P273 - Avoid release to the environment.

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

: EUH208 - Contains: 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an

allergic reaction.

2.3. Other hazards

EUH-statements

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]
Gas oil - unspecified	CAS-No.: 64742-46-7 EC-No.: 265-148-2 EC Index-No.: 649-221-00-X REACH-no: 01-2119489867- 12	≥ 1 – ≤ 2,99	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Isooctadecanoic acid, reaction products with tetraethylenepentamine	CAS-No.: 68784-17-8 EC-No.: 701-204-9 REACH-no: 01-2119960832- 33	≥ 1 – ≤ 2,49	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Reaction product of alkylthioalcohol and substituted phosphorous compound	EC-No.: 424-820-7 REACH-no: 01-0000017126- 75	≥ 0,1 - < 0,5	Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	CAS-No.: 93882-40-7 EC-No.: 299-434-3 REACH-no: 01-2120735527- 50	≥ 0,1 – ≤ 0,25	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1- propanamine	EC-No.: No Longer Polymer REACH-no: 01-0000015551- 76	≥ 0,1 - ≤ 0,25	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

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.

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

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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, including any incompatibilities

Technical measures : Store in a closed container.

Storage conditions : Keep container closed when not in use.

Storage temperature : ≤ 40 °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

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

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid. Colour Green. Appearance Oily liquid. Odour Characteristic. Odour threshold Not available Melting point Not available Freezing point Not available Not available Boiling point Flammability Not available **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available

Flash point : > 180 °C @ ASTM D92

Auto-ignition temperature : Not available
Decomposition temperature : Not available
pH : Not available
Viscosity, kinematic : 38 mm²/s @ 40°C

Solubility : Slightly soluble, the product remains on the water surface.

Log Kow : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available : 846 kg/m³ @ 15°C Density : Not available Relative density Relative vapour density at 20°C : Not available : Not applicable Particle size : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable Particle aspect ratio : Not applicable Particle aggregation state 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 defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Reaction product of alkylthioalcohol and substituted phosphorous compound	
LD50 oral rat	> 2000 mg/kg 67/548/EEG Annex V,B1
LD50 dermal rat	> 500 mg/kg 67/548/EEG Annex V, B3
ATE CLP (dermal)	1100 mg/kg bodyweight

4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

LD50 oral > 10000 mg/kg

Gas oil - unspecified (64742-46-7)

ATE CLP (gases)

···= ·=· (9)	
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)

and the second process of the second process	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

4500 ppmy/4h

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N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1-propanamine	
LD50 oral rat	2000 – 5000 mg/kg
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
Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)	
LOAEL (oral, rat)	> 1000 mg/kg bodyweight OECD 421
STOT-repeated exposure	: Not classified

Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)		tetraethylenepentamine (68784-17-8)
	NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight OECD 407
	Aspiration hazard :	Not classified

MPM DCTF Double Clutch Transmission Fluid	
Viscosity, kinematic	38 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

Hazardous to the aquatic environment, short-term : Not classified

Hazardous to the aquatic environment, long-term

: Harmful to aquatic life with long lasting effects.

(chronic)

(All office)	
Reaction product of alkylthioalcohol and substituted phosphorous compound	
LC50 fish 1	1,5 mg/l OECD203 - Oncorhynchus mykiss
EC50 Daphnia 1	0,09 mg/l OECD 202 - EL50
EC50 72h - Algae [1]	0,31 mg/l 67/548/EEG Annex V,C3
NOEC (chronic)	0,14 mg/l Daphnia
NOEC chronic crustacea	0,14 (0,01 – 0,1) mg/l
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)	
LC50 fish 1	> 1000 mg/l 96h Cyprinodon variegatus OECD 203
LC50 fish 2	> 100 mg/l 96h Oryzias latipes OECD 203
EC50 Daphnia 1	9,5 mg/l OECD 202
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subscapitata- OECD 201

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Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)	
LC50 fish 1	> 1000 mg/l OECD 203
EC50 Daphnia 1	> 1000 mg/l OECD 202
N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1-propanamine	
LC50 fish 1 650 mg/l @96h OECD 203 - Cyprinodon variegatus	

12.2. Persistence and degradability

MPM DCTF Double Clutch Transmission Fluid	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.
Reaction product of alkylthioalcohol and substituted phosphorous compound	
Persistence and degradability	Not readily biodegradable.
Biodegradation	52,9 % @60d OECD 301B - 10mg/l
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	11 – 14 % OECD 301
Gas oil - unspecified (64742-46-7)	
Persistence and degradability	Readily biodegradable.
Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)	
Persistence and degradability	Readily biodegradable.
N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1-propanamine	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Reaction product of alkylthioalcohol and substituted phosphorous compound		
Bioaccumulative potential	Bioaccumulation possible.	
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)		
ioaccumulative potential Bioaccumulation possible.		
N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1-propanamine		
Log Pow	> 6	

12.4. Mobility in soil

MPM DCTF Double Clutch Transmission Fluid		
Soil	Prevent soil and water pollution.	
Reaction product of alkylthioalcohol and substituted phosphorous compound		
Soil	Adsorbs into the soil.	
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)		
Soil	Adsorbs into the soil.	
N,N-bis(2-hydroxyethyl)-3-((C16-18) alkoxy)-1-propanamine		
Soil	Adsorbs into the soil.	

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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.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations. European List of Waste (LoW, EC 2000/532) : 13 02 06* - synthetic engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / IMDG

14.1. UN number or ID number

UN-No. (IMDG) : Not regulated : 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

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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

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Hazardous to the aquatic environment, long-term (chronic) - comment	Added	
	Supersedes	Modified	
	Revision date	Modified	
	Type of product	Added	
1.1	Product group	Added	
1.1	Product form	Added	
1.1	Trade name	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]	Added	
2.2	EUH-statements	Added	
2.2	Precautionary statements (CLP)	Added	
2.2	Hazard statements (CLP)	Added	
3	Composition/information on ingredients	Modified	
8.2	Personal protective equipment	Modified	
9.1	Density	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
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

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Full text of H- and EUH-statements		
Asp. Tox. 1	Aspiration hazard, Category 1	
EUH208	Contains: 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. 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	
H304	May be fatal if swallowed and enters airways.	
H312	Harmful in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
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.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	

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.