



ATF Automatic Transmission Fluid FM+

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 18-10-2010 Revision date: 23-3-2021 Supersedes: 12-3-2020 version: 6.0

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

1.1. Product identifier

Product form : Mixture
Product name : ATF Automatic Transmission Fluid FM+
Product code : 16000FM

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
Use of the substance/mixture : Automotive care products
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

MPM International Oil Company
Cyclotronweg 1
2629 HN Delft Delft - Nederland
T +31 (0)15 2514030 - F +31 (0)15 2514031
msds@mpmoil.nl - www.mpmoil.nl

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]

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]

CLP Signal word : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of container to an approved waste disposal plant.
EUH-statements : EUH208 - Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction.

2.3. Other hazards

No additional information available

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

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Base oil - unspecified	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	75 – 95	Asp. Tox. 1, H304
bis(nonylphenyl)amine	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	1 – 2,49	Aquatic Chronic 4, H413
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	(CAS-No.) 125643-61-0 (EC-No.) 406-040-9 (EC Index-No.) 607-530-00-7 (REACH-no) 01-0000015551-76	1 – 2,49	Aquatic Chronic 4, H413
Reaction products of fatty acids, C14-C18 and C18 (unsaturated) with tetraethylenepentamine	(EC-No.) 701-204-9 (REACH-no) 01-2119960832-33	0,1 – 0,99	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 – 0,24	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	0,01 – 0,15	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich	(CAS-No.) 398141-87-2 (EC-No.) 800-172-4 (REACH-no) 01-2119969520-35	0,01 – 0,15	Aquatic Chronic 2, H411

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
After skin contact	: Gently wash with plenty of soap and water.
After eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes.
After ingestion	: Rinse mouth. Call a physician immediately. Do NOT induce vomiting.

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

Symptoms/effects : Not expected to present a significant 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

Other information : Exercise caution when fighting any chemical fire. 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 : No open flames. No smoking.

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 liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Other information : If spilled, may cause the floor to be slippery.

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling temperature : < 40 °C
Hygiene measures : 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 : Store in a well-ventilated place. Keep container tightly closed.
Storage conditions : Keep only in original container.
Storage temperature : < 40 °C
Storage area : Keep in a cool, well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Base oil - unspecified (64742-54-7)

EU	IOELV TWA (mg/m ³)	5 mg/m ³ 06/2011
EU	IOELV STEL (mg/m ³)	10 mg/m ³ 06/2011
Germany	TRGS 910 Acceptable concentration notes	

8.2. Exposure controls

Technical measures:

Ensure good ventilation of the work station. Ensure that there is a suitable ventilation system.

Personal protective equipment:

Safety glasses. Gloves.

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Safety goggles

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Oily.
Colour : amber.
Odour : characteristic.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available

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Flash point	: > 200 °C (ASTM D92)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 849 g/l
Solubility	: Water: practically insoluble
Log Pow	: No data available
Viscosity, kinematic	: 33 mm ² /s 40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

None under normal conditions.

10.5. Incompatible materials

acids and bases. Oxidizing agent.

10.6. Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, nitrogen oxides (NO_x), sulphur compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

bis(nonylphenyl)amine (36878-20-3)

LD50 oral rat	> 5000 mg/kg OECD 401
LD50 dermal rat	> 2000 mg/kg OECD 402

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

LD50 oral rat	> 2000 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

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

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

LD50 oral	> 10000 mg/kg
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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

LD50 dermal rabbit	4000 – 8000 mg/kg bodyweight US 16 CFR 1500.3 Federal Hazardous Substances Act
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Base oil - unspecified (64742-54-7)

LD50 oral	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 5000 mg/l/4h mg/m3 @4h

Reaction products of fatty acids, C14-C18 and C18 (unsaturated) with tetraethylenepentamine

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 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

Reaction products of fatty acids, C14-C18 and C18 (unsaturated) with tetraethylenepentamine

NOAEL (oral, rat)	> 1000 mg/kg bodyweight OECD 421
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STOT-repeated exposure : Not classified

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

NOAEL (oral, rat, 90 days)	5 mg/kg bodyweight OECD 407
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Aspiration hazard : Not classified

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Viscosity, kinematic	33 mm ² /s 40°C
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SECTION 12: Ecological information

12.1. Toxicity

General	: No data available.
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.

bis(nonylphenyl)amine (36878-20-3)

LC50 fish 1	> 100 mg/l OECD 203 (Danio rerio @ 96h)
EC50 Daphnia 1	> 100 mg/l OECD 202 Daphnia magna
EC50 72h algae (1)	> 100 mg/l (Desmodesmus subspicatus)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

LC50 fish 1	74 mg/l @96h
LC50 fish 2	100 mg/l @ 14d
EC50 Daphnia 1	4,3 mg/l @ 24 h
EC50 Daphnia 2	100 mg/l @ 48 h
EC50 72h algae (1)	3 mg/l
NOEC (chronic)	≤ 0,01 mg/l Daphnia magna @21d
NOEC chronic fish	0,5 mg/l @ 36 d
NOEC chronic algae	3 mg/l @ 72 h

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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

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

LC50 fish 1	> 1000 ml/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 subcapitata- OECD 201

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

LC50 fish 1	2,4 mg/l Oncorhynchus mykiss
LC50 fish 2	3,3 mg/l Cyprinodon variegatus
EC50 Daphnia 1	4,6 mg/l Faphnia Magna
EC50 72h algae (1)	63 mg/l Selenastrum capricornutum
NOEC chronic fish	1 mg/l @4d Oncorhynchus mykiss
NOEC chronic crustacea	0,63 mg/l 2d Daphnia magna
NOEC chronic algae	0,313 mg/l 3d Selenastrum capricornutum

Base oil - unspecified (64742-54-7)

LC50 fish 1	> 100 mg/l Pimephales promelas @4d
EC50 Daphnia 1	> 10000 mg/l
EC50 Daphnia 2	> 10 mg/l 21d
EC50 96h algae (1)	> 100 mg/l 3d - Chlorophyta
NOEC (chronic)	> 10 mg/l 21d

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable.
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bis(nonylphenyl)amine (36878-20-3)

Persistence and degradability	Not readily biodegradable.
Biodegradation	1 % @28d

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

Persistence and degradability	Not readily biodegradable.
Biodegradation	1 % @28 d

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

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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

Persistence and degradability	Not readily biodegradable.
BOD (% of ThOD)	9,6 % ThOD Thod 28d OECD TG 301F

Base oil - unspecified (64742-54-7)

Biodegradation	31 % 28d - OECD TG 301 B
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Reaction products of fatty acids, C14-C18 and C18 (unsaturated) with tetraethylenepentamine

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

bis(nonylphenyl)amine (36878-20-3)

Log Pow	> 7,6
Bioaccumulative potential	Bioaccumulative potential.

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

BCF fish 1	260 mg/kg OECD 305 (Oncorhynchus mykiss, 35d)
Bioconcentration factor (BCF REACH)	258 (OECD 305 method)
Log Pow	9,2
Bioaccumulative potential	Moderately bioaccumulative.

Reaction product of alkylthioalcohol and substituted phosphorous compound

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

Bioaccumulative potential	Bioaccumulative potential.
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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

Bioconcentration factor (BCF REACH)	27,54
Log Kow	4,1
Bioaccumulative potential	Expected to bio accumulate.

12.4. Mobility in soil

bis(nonylphenyl)amine (36878-20-3)

Soil	Adsorbs into the soil.
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reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

Log Koc	> 2000
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Reaction product of alkylthioalcohol and substituted phosphorous compound

Soil	Adsorbs into the soil.
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4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7)

Soil	Adsorbs into the soil.
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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)

Soil	Adsorbs into the soil.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
European List of Waste (LoW) code	: 13 02 00 - waste engine, gear and lubricating oils 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable
14.4. Packing group	
Not applicable	Not applicable
14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
No supplementary information available	

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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 REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 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

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), 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

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Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
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.
H319	Causes serious eye irritation.
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.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction.

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.