

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

	dentification of the subst	tance/mixture and of the	company/undertaking			
1.1. Product ide	entifier	Mistar				
Product form			: Mixture			
Product name			on Fluid ATF+4 Chrysler / Jeep			
Product code		: 16000CH				
1.2. Relevant id	entified uses of the substa	nce or mixture and uses ad	dvised against			
1.2.1. Relevant id	entified 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 advis	ad against					
No additional infor	•					
ite additional inter	he supplier of the safety da	ta sheet				
MPM International						
Cyclotronweg 1						
2629 HN Delft Del						
msds@mpmoil.nl	030 - F +31 (0)15 2514031 - www.mpmoil.nl					
	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	PO Box 1297	+353 1 809 2566 (Healthcare			
	Centre	Beaumont Road	professionals-24/7)			
	Beaumont Hospital	9 Dublin	+353 1 809 2166 (public, 8am			
			- 10pm, 7/7)			
United Kingdom	Guy's & St Thomas' Poisons	Avonley Road	+44 20 7188 7188			
	Unit Medical Toxicology Unit,	SE14 5ER London				
	Guy's & St Thomas' Hospital					
	Trust					
		,	,]		
SECTION 2: H	lazards identification					
2.1. Classificati	on of the substance or mix	ture				
Classification ac	cording to Regulation (EC) No.	1272/2008 [CLP]				
	3 ••• 3 ••• 3 ••• (-0) •••					
Hazardous to the	aquatic anvironment Chronic I	Jazard Catagon 2 4112				

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. 12	272/2008 [CLP]
CLP Signal word	1-
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 effect	s, 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 substa	ince or mixture
No additional information available	
5.3. Advice for firefighters	
Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
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 Protective equipment	: Wear suitable protective clothing and gloves.		
6.1.2. For emergency responders			
Protective equipment	: Wear suitable protective clothing and gloves.		
6.2. Environmental precautions Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.			

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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	: Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).				
Other information	: If spilled, may cause the floor to be slippery.				
6.4. Reference to other sections					
For further information refer to section 13.					

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Provide sufficient air exchange and/or exhaust. Avoid contact with skin and eyes.
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, includi	ng 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	

8.1. Control parameters	controls/personal protection sion Fluid ATF+4 Chrysler / Jeep						
EU	EU IOELV TWA (mg/m ³) 5 mg/m ³						
Base oil - unspecified (64742-54-7)							
EU	IOELV TWA (mg/m ³)	5 mg/m³ 06/2011					
EU	IOELV STEL (mg/m³)	10 mg/m ³ 06/2011					
Germany	TRGS 910 Acceptable concentration notes						
Additional information	: Based on ACGIH TLV, a concentration	of 5 mg/m3 oilspray (TWA, 8 hour workday) is					

iy) recommended.

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):



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SECTION 9: Physical and chemical p	
9.1. Information on basic physical and ch	
Physical state	: Liquid
Appearance	: Oily.
Colour	: red.
Odour	: characteristic.
Odour threshold	: No data available
рН	: 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
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	: Slightly soluble, the product remains on the water surface.
	Water: practically insoluble
Log Pow	: No data available
Viscosity, kinematic	: 33 mm²/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	

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 (NOx), 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
Additional information	: Elevated temperatures or mechanical action can irritate the nose, throat and lungs. Low order of acute / systemic toxicity.
bis(nonylphenyl)amine (36878-20-3)	
LD50 oral rat	> 5000 mg/kg OECD 401

LD50 dermal rat

> 2000 mg/kg OECD 402

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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

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

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	
Additional information	: Repeated or prolonged skin contact may cause irritation	
Serious eye damage/irritation	: Not classified	
Additional information	: slightly irritated but not relevant for classification.	
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 a	nd C18 (unsaturated) with tetraethylenepentamine	
NOAEL (oral, rat)	> 1000 mg/kg bodyweight OECD 421	
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	
Aspiration hazard	: Not classified	
ATF Automatic Transmission Fluid ATF+4 Chrysler / Jeep		
Viscosity, kinematic	33 mm²/s 40°C	

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.

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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 (Desmodesdus 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

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 subscapitata- 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	
ATF Automatic Transmission Fluid ATF+4 Chrysler / Jeep	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.

Biodegradation

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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.

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

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 3	1 % 28d - OECD TG 301 B

Reaction products of fatty acids, C14-C18 and C18 (unsaturated) with tetraethylenepentamine	
Persistence and degradability Readily biodegradable.	
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.
Dioaccumulative potential	Diaccumulative potential.

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

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.

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12.4. Mobility in soil		
bis(nonylphenyl)amine (36878-20-3)		
Soil	Adsorbs into the soil.	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
Log Koc	> 2000	
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.	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2)		
Soil	Adsorbs into the soil.	
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		

No additional information available

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 / RI	In accordance with ADR / RID / IMDG / IATA / ADN		
ADR	IMDG		
14.1. UN number			
Not applicable	Not applicable		
14.2. UN proper shippin	g name		
Not applicable	Not applicable		
14.3. Transport hazard o	:lass(es)		
Not applicable	Not applicable		
14.4. Packing group			
Not applicable	Not applicable		
14.5. Environmental haz	ards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No		
No supplementary informatio	n available		
14.6. Special precaution	s 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

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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 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 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. Causes serious eye irritation. H319 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. Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction. EUH208

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.