16000ZF6S



ATF Automatic Transmission Fluid ZF6 Special

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 10-8-2011 Revision date: 17-6-2020 Supersedes: 9-8-2019 version: 5.0

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 ZF6 Special

Product code : 16000ZF6S
Product group : Trade product

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,Industrial 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 | Beaumont Hospital Beaumont Road 9 Dublin | : +353 1 8379964 | |
| 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 contents and 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

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3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|--|--|
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | (CAS-No.) 72623-87-1 (EC-No.) 276-738-4 (EC Index-No.) 649-483-00-5 (REACH-no) 01-2119474889-13 | 25 – 50 | Asp. Tox. 1, H304 |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based Baseoil - unspecified | (CAS-No.) 72623-86-0 (EC-No.) 276-737-9 (EC Index-No.) 649-482-00-X (REACH-no) 01-2119474878-16 | 1 – 2,49 | Asp. Tox. 1, H304 |
| Isooctadecanoic acid, reaction products with tetraethylenepentamine | (CAS-No.) 68784-17-8 (EC-No.) 272-225-4 (REACH-no) 01-2119960832-33 | 0,1 – 0,49 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| 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 | 0,1 – 0,49 | Aquatic Chronic 2, H411 |
| 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 | 0,1 – 0,24 | Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Specific concentration limits: | | | |
| Name | Product identifier | Specific co | oncentration limits |
| Reaction product of alkylthioalcohol and substituted phosphorous compound | (EC-No.) 424-820-7 (REACH-no) 01-0000017126-75 | (0,1 ≤C < 0,24) Aquatic Chronic 1, H410 | |

Full text of H-statements: see section 16

SECTION 4: First aid measures

| 4.1. Description of first aid measure | |
|---------------------------------------|--|
| | |

General : If medical advice is needed, have product container or label at hand.

After inhalation : Remove person to fresh air and keep comfortable for breathing. If necessary seek medical

advice.

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 : In case of eye contact, immediately rinse with clean water for 10-15 minutes. If eye

irritation persists: Get medical advice/attention.

After ingestion : Get immediate medical advice/attention. Do NOT induce vomiting. Rinse mouth out with

water.

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

No additional information available

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 : Sand. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Vapours may cause fire/explosion if source of ignition is present. May form

flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

Other information : 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 : Ventilate well.

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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

Notify authorities if product enters sewers or public waters. Prevent liquid from entering sewers, watercourses, underground or low areas.

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 8: "Exposure controls/personal protection". Information on safe handling - see Section 7.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist.

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 : Keep in a cool, well-ventilated place away from heat.

 $\begin{tabular}{ll} Incompatible products & : Oxidizing agent. \\ Storage temperature & : 0 - 50 \ ^{\circ}C \end{tabular}$

Storage area : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1) | | |
|---|---|----------|
| EU | IOELV TWA (mg/m³) | 5 mg/m³ |
| EU | IOELV STEL (mg/m³) | 10 mg/m³ |
| Germany | TRGS 910 Acceptable concentration notes | |

Additional information : Based on ACGIH TLV, a concentration of 5 mg/m3 oilspray (TWA, 8 hour workday) is

recommended.

8.2. Exposure controls

Technical measures:

Ensure that there is a suitable ventilation system.

Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

Hand protection:

protective gloves

| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
|------|---------------------------|-------------------|----------------|-------------|----------|
| | Neoprene rubber (HNBR) | 6 (> 480 minutes) | >0.35 | | |

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

Other information:

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Oily.Colour: Green.

Odour : No data available
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

Flash point : > 150 °C

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 : 848 g/l

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

Log Pow : No data available
Viscosity, kinematic : 31 mm²/s 40C
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

No additional information available

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

Protect from sunlight. High temperature.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

None under normal conditions.

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

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

LD50 oral rat > 5000 mg/kg bodyweight OECD 401

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based Baseoil - unspecified (72623-86-0)

LD50 oral rat > 5000 mg/kg bodyweight

| Reaction product of alkylthioalcohol and subs | | stituted 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 |

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| LD50 dermal rabbit | > 500 mg/kg bodyweight | |
|--------------------|------------------------|--|
|--------------------|------------------------|--|

| Isooctadecanoic acid, reaction products with | tetraethylenepentamine (68784-17-8) |
|--|-------------------------------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |

| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-rich (398141-87-2) | | isoalkyloxy)derivs., C10-rich (398141-87-2) |
|---|--------------------|--|
| | LD50 dermal rabbit | 4000 – 8000 mg/kg bodyweight US 16 CFR 1500.3 Federal Hazardous Substances Act |

| ,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7) | |
|--|---|
| LD50 oral | > 10000 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 | : Causes eye irritation |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |

| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy)derivs., C10-ric | | isoalkyloxy)derivs., C10-rich (398141-87-2) |
|--|-----------------------------|---|
| | NOAEL (animal/male, F0/P) | 175 mg/kg bodyweight male rat: OECD 421 |
| | NOAEL (animal/female, F0/P) | 175 mg/kg bodyweight Male rat: OECD Guideline 421 |

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

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1) | |
|---|-------------------------------|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight OECD 408 |

| Lubricating oils (petroleum), C15-30, hydrotre | ated neutral oil-based Baseoil - unspecified (72623-86-0) |
|--|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight |

| Reaction product of alkylthioalcohol and substituted phosphorous compound | |
|---|---------------------|
| NOAEL (oral, rat, 90 days) | 50 ma/ka bodyweiaht |

| Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8) | |
|--|----------------------------------|
| NOAEL (oral, rat, 90 days) | > 1000 mg/kg bodyweight OECD 407 |

Aspiration hazard : Not classified

| ATF Automatic Transmission Fluid ZF6 Special | |
|--|--------------|
| Viscosity, kinematic | 31 mm²/s 40C |

SECTION 12: Ecological information

12.1. Toxicity

General : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

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Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects. (chronic)

| Reaction product of alkylthioalcohol and substituted phosphorous compound | |
|---|-------------------------------|
| LC50 fish 1 | 1,5 mg/l |
| EC50 Daphnia 1 | 0,09 mg/l |
| EC50 Daphnia 2 | 0,22 21d |
| EC50 72h algae (1) | 0,31 mg/l |
| LOEC (chronic) | 0,35 mg/l Daphnia magna @21 d |
| NOEC (chronic) | 0,14 mg/l |
| NOEC chronic algae | 0,13 mg/l |

| 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 |
| EC50 96h algae (1) | 44 mg/l Pseudokirchneriella subcapitata |
| EC50 96h algae (2) | 94 mg/l Pseudokirchneriella subcapitata |
| LOEC (chronic) | 100 mg/l Daphnia magna @21d |
| NOEC (chronic) | 32 mg/l Daphnia magna @21d |

| 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 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 |

| 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 |
| 42.2. Develotones and degradability | |

12.2. Persistence and degradability

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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 |

| Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8) | |
|--|------------------------|
| Persistence and degradability | Readily biodegradable. |

| 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 |

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| 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7) | |
|---|-------------------------|
| Persistence and degradability Not readily biodegradable. | |
| Biodegradation | 11 – 14 % OECD 301 |
| 12.3. Bioaccumulative potential | |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1) | |
| Log Pow | > 6 |
| Bioaccumulative potential | highly bioaccumulative. |

| Reaction product of alkylthioalcohol and substituted phosphorous compound | |
|---|----------------------------|
| 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. |

| 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate (93882-40-7) | |
|---|----------------------------|
| Bioaccumulative potential | Bioaccumulative potential. |
| 12.4. Mobility in soil | |
| Reaction product of alkylthioalcohol and substituted phosphorous compound | |
| Log Koc | 0,343 – 5,315 |
| 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. |

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

Product/Packaging disposal recommendations : Do not dispose of with domestic waste.

Waste disposal recommendations : Remove to an authorized waste treatment plant.

European List of Waste (LoW) code : 13 02 06* - synthetic engine, gear and lubricating oils

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 shippin | g name |
| Not applicable | Not applicable |
| 14.3. Transport hazard o | class(es) |
| Not applicable | Not applicable |

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| 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 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 |
| 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 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. |

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| H411 | Toxic to aquatic life with long lasting effects. |
|--------|--|
| H412 | Harmful to aquatic life with long lasting effects. |
| 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.