



DSG Direct Shift Gearbox Special Fluid

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 14-2-2011 Revision date: 30-8-2021 Supersedes: 26-10-2020 version: 3.0

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

1.1. Product identifier

Product form : Mixture
Product name : DSG Direct Shift Gearbox Special Fluid
Product code : 16000DSG
Type of product : Other engine, gear and lubricating oils.
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 : 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
support@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]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains Boric ester. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

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	≥ 60 – ≤ 85	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic, Baseoil (Note L)	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3 (REACH-no) 01-2119487077-29	≥ 1 – ≤ 10	Asp. Tox. 1, H304
Isooctadecanoic acid, reaction products with tetraethylenepentamine	(CAS-No.) 68784-17-8 (EC-No.) 701-204-9 (REACH-no) 01-2119960832-33	≥ 1 – ≤ 1,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
C14-18 alpha-olefin epoxide, reaction products with boric acid	(EC-No.) 939-580-3 (REACH-no) 01-2119976364-28	≥ 0,1 – ≤ 0,5	Skin Sens. 1B, H317
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	(CAS-No.) 1218787-32-6 (EC-No.) 620-540-6 (REACH-no) 01-2119510877-33	≥ 0,1 – ≤ 0,2	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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.
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 CO ₂ .
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

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing and gloves.
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6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

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

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 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

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

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses.

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	Nitrile rubber (NBR), Chloroprene rubber (CR)	6 (> 480 minutes)	> 0,4		EN ISO 374

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 properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily liquid.
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
Flash point	: > 180 °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	: 846 kg/m ³ @ 15°C
Solubility	: Slightly soluble, the product remains on the water surface.
Log Pow	: No data available
Viscosity, kinematic	: 38 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

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 toxicological effects

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

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

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

Base oil - unspecified (64742-54-7)

LD50 oral	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 5 mg/l/4h

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Distillates (petroleum), hydrotreated light paraffinic, Baseoil (64742-55-8)

LD50 oral rat	> 5000 mg/kg OECD 420
LD50 dermal rabbit	> 5000 mg/kg OECD 402
LC50 Inhalation - Rat	> 5 mg/l/4h OECD 403

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
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Base oil - unspecified (64742-54-7)

NOAEL (dermal, rat/rabbit)	> 2000 mg/kg bodyweight
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STOT-repeated exposure	: Not classified
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Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)

NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight OECD 407
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Base oil - unspecified (64742-54-7)

NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight/day
NOAEL (subacute, oral, animal/male, 28 days)	> 220 mg/kg bodyweight
NOAEL (subchronic, oral, animal/male, 90 days)	> 980 mg/kg bodyweight

Aspiration hazard	: Not classified
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Viscosity, kinematic	38 mm ² /s @ 40°C
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SECTION 12: Ecological information

12.1. Toxicity

General	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

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

Base oil - unspecified (64742-54-7)

LC50 fish 1	100 mg/l
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C14-18 alpha-olefin epoxide, reaction products with boric acid

LC50 fish 1	> 100 mg/l (Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 mg/l (Daphnia magna)
EC50 72h - Algae [1]	> 100 mg/l (Selenastrum capiricomutum)
NOEC (acute)	NOEC Acute 32 mg/l @ 2DY (Daphnia Magna)

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2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

LC50 fish 1	0,1 mg/l Brachydanio rerio
EC50 Daphnia 1	0,043 mg/l Daphnia magna
EC50 72h - Algae [1]	0,0053 mg/l Pseudokirchneriella subcapitata
NOEC chronic algae	0,0156 mg/l @3DY (Pseudokirchneriella subcapitata)

Distillates (petroleum), hydrotreated light paraffinic, Baseoil (64742-55-8)

EC50 Daphnia 1	> 10000 mg/l OECD 202
EC50 other aquatic organisms 1	> 100 mg/l OECD 201
EC50 96h - Algae [1]	> 100 mg/l OECD 203
NOEC chronic fish	> 1000 mg/l 14/21d (Oncorhynchus mykiss - SQAR Petrotox)
NOEC chronic crustacea	10 mg/l OECD 211

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable.
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Isooctadecanoic acid, reaction products with tetraethylenepentamine (68784-17-8)

Persistence and degradability	Readily biodegradable.
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2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

BOD (% of ThOD)	63 % ThOD @28DY OECD TG 301 D
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12.3. Bioaccumulative potential

C14-18 alpha-olefin epoxide, reaction products with boric acid

Log Kow	9,4 Calc.
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2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

BCF fish 1	110,2 mg/kg
Log Kow	3,6

12.4. Mobility in soil

No additional information available

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 06* - synthetic engine, gear and lubricating oils 13 02 00 - waste engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / IMDG

ADR	IMDG
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable

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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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Isooctadecanoic acid, reaction products with tetraethylenepentamine

3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

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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

Indication of changes:

Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Removed	
2.2	EUH-statements	Modified	
2.2	Precautionary statements (CLP)	Added	
3	Composition/information on ingredients	Modified	
4.1	After skin contact	Modified	
4.1	After inhalation	Modified	

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4.1	After ingestion	Modified	
4.2	After skin contact	Added	
4.2	After inhalation	Added	
4.2	After ingestion	Added	
4.2	After eye contact	Added	
5.3	Precautionary measures fire	Added	
5.3	Firefighting instructions	Added	
6.1	Protective equipment	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
6.3	Other information	Modified	
7.1	Additional hazards when processed	Added	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Technical measures	Added	
7.2	Storage temperature	Modified	
7.2	Storage area	Modified	
8	Regulatory reference	Added	
8.1	IOELV TWA (mg/m3)	Added	
8.1	Local name	Added	
8.1	IOELV STEL (mg/m3)	Added	
8.2	Hand protection	Modified	
8.2	Eye protection	Modified	
8.2	Skin and body protection	Modified	
9.1	Solubility	Added	
9.1	Viscosity, kinematic	Modified	
9.1	Appearance	Modified	
9.1	Flash point	Modified	
9.1	Density	Modified	
10.1	Reactivity	Modified	
10.2	Chemical stability	Modified	
10.3	Possibility of hazardous reactions	Added	
10.4	Conditions to avoid	Modified	
10.6	Hazardous decomposition products	Modified	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Boric ester. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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.