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

1.1 Product identifier

Trade name/designation Mercedes-Benz Genuine Automatic Transmission Fluid FE MB 236.15

MB-Freigabe-Nr 236.15

Product category PC-TEC-8 Hydraulic fluids, including brake and transmission fluids

Hazard components
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture
Transmission oil

Uses advised against
This product should not be used for other purposes than those specified without the advice of an expert.

1.3 Details of the supplier of the safety data sheet

Supplier
Mercedes-Benz AG
70546 Stuttgart
Germany
+49 (0)711 17-0
Telefon + 49 (0)711 17-97390
Telefax + 49 (0)711 17-94831
E-Mail (fachkundige Person) mercedes-benz-sdb@mercedes-benz.com

Manufacturer
Mercedes-Benz AG

70546 Stuttgart
Germany

Telephone +49 711 17-0
E-mail (competent person):
mercedes-benz-sdb@mercedes-benz.com

1.4 Emergency telephone number

+49 711 17-0
gms.aftersales.mercedes-benz.com

Giftnotruf der Charité – Universitätsmedizin Berlin +49 (0)30 30686700

! SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Asp. Tox. 1, H304	

hazard statements for health hazards
H304 May be fatal if swallowed and enters airways.

2.2 Label elements

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

Hazard components
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Hazard pictograms

GHS08

Signal word
Danger

Hazard statements
H304 May be fatal if swallowed and enters airways.

Precautionary statements
P102 Keep out of reach of children.
P331 Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P501 Dispose of contents/container in accordance with regional regulations.

! 2.3 Other hazards

! **Adverse human health effects and symptoms**
The mixture does not contain substances >=0.1% of substances that have endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Article 59(1) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

! **Adverse environmental effects**
The mixture does not contain substances >=0.1% of substances that have endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Article 59(1) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

Other adverse effects
Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

! SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

! 3.2 Mixtures

Description
Severely refined mineral and/or synthetic oils, additives.

Hazardous ingredients

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
72623-87-1	276-738-4	649-483-00-5	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	70 < 90 %	Asp. Tox. 1; H304	ATE(oral): > 5000 mg/kg ATE(dermal): > 2001 mg/kg

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
1218787-32-6	620-540-6		2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.1 < 0.25 %	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M=10 (Aquatic Acute 1) M=1 (Aquatic Chronic 1) ATE(oral): 1350 mg/kg
	939-485-7		3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	0.05 < 0.1 %	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M=100 (Aquatic Acute 1) M=1 (Aquatic Chronic 1) ATE(oral): 500 mg/kg
124-28-7	204-694-8		dimantine	0.05 < 0.1 %	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M=10 (Aquatic Acute 1) ATE(oral): 1230 mg/kg ATE(dermal): 8000 mg/kg

REACH No.	Substance name
01-2119474889-13	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
01-2119510877-33	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol
01-2119974116-35	3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
01-2119486676-20	dimantine

Remark
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated, saturated clothing immediately.
Observe risk of aspiration if vomiting occurs.

Following inhalation
Provide fresh air.
In the event of symptoms refer for medical treatment.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lens

Following ingestion
Do NOT induce vomiting.
Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Effects
Aspiration vermeiden, da diese zu schweren Lungenschäden (Lungenödem, Lungenentzündung) führen kann.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
alcohol resistant foam
Extinguishing powder
Carbon dioxide (CO2)
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Fire gas of organic material has to be classed invariably as respiratory poison.
In the event of fire the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide
Carbon dioxide (CO2)
Sulphur dioxide (SO2)

5.3 Advice for firefighters

Special protective equipment for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Co-ordinate fire-fighting measures to the fire surroundings.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Cool endangered containers with water spray and possibly remove them from fire site.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Avoid skin and eye contact.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Special danger of slipping by leaking/spilling product.

For emergency responders
Personal protection equipment
Use breathing apparatus if exposed to vapours/dust/aerosol.
Keep away unprotected persons
Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment
Collect with spongy material (all-purpose gelation agent) and dispose of in compliance with the regulations.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures
Avoid:
generation/formation of aerosols
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Do not heat up to temperatures close to the flash point.
All work processes must always be designed so that the following is as low as possible:
Skin contact
Adhere to general precaution rules when handling chemicals
Do not put any product-impregnated cleaning rags into your trouser pockets.

Advices on general occupational hygiene
When using do not eat, drink, smoke, sniff.
Keep away from food and drink.
Wash hands before breaks and after work.
Use protective skin cream before handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container.

Further information on storage conditions
Keep away from foods and beverages
Keep container tightly closed in a cool, well-ventilated place.
Protect against:
Heat

7.3 Specific end use(s)

Recommendation
See section 1.2

! SECTION 8: Exposure controls/personal protection

! 8.1 Control parameters

! DNEL worker

CAS No	Substance name	DNEL value	DNEL type	Remark
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.3 mg/kg bw/day	long-term dermal (systemic)	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	2.112 mg/m^3	long-term inhalative (systemic)	

! DNEL Consumer

CAS No	Substance name	DNEL value	DNEL type	Remark
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.214 mg/kg bw/day	Long-term – oral, systemic effects	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.214 mg/kg bw/day	long-term dermal (systemic)	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.214 mg/kg bw/day	long-term dermal (systemic)	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.745 mg/m^3	long-term inhalative (systemic)	

! PNEC

CAS No	Substance name	PNEC Value	PNEC type	Remark
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.000214 mg/L	aquatic, freshwater	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	2.14e-005 mg/L	aquatic, marine water	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	1.692 mg/kg	sediment, freshwater	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	0.1692 mg/kg	sediment, marine water	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	1.5 mg/L	sewage treatment plant (STP)	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	5 mg/L	soil	

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure
Sufficient ventilation and exhaustion.

Personal protection equipment

Eye/face protection
Safety glasses recommended during transfer
EN 166

Hand protection
Glove materials data [type, thickness, breakthrough time/duration of use, permeation rate]: Nitrile rubber (protection index 6, >480 min, 0.4 mm)
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and. the resultant standard EN374.

Body protection:
Protective clothing

Respiratory protection
Respiratory protection necessary at:
aerosol or mist formation
high concentrations
Suitable respiratory protection apparatus:
Filtering device (full mask or mouthpiece) with filter:
AX

! SECTION 9: Physical and chemical properties

! 9.1 Information on basic physical and chemical properties

Physical state
liquid

! **Colour**
blue

Odour
characteristic

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
Melting point/freezing point	not determined		
Boiling point or initial boiling point and boiling range	not determined		
flammability	not determined		
Lower and upper explosion limit	not determined		
Flash point	190 °C	ASTM D 93	
Auto-ignition temperature	not determined		
Decomposition temperature	not determined		
pH	in delivery state		not applicable
Viscosity	kinematic 18 mm^2/s (15°C)	ASTM D445	
Solubility(ies)	Water solubility		practically insoluble
Partition coefficient n-octanol/water (log value)	not determined		

	Value	Method	Source, Remark
Vapour pressure	not determined		
Density and/or relative density	Density and/or relative density 0.84 g/cm³	ASTM D 4052	
Relative vapour density	not determined		
particle characteristics	not determined		

9.2 Other information

Other safety characteristics

	Value	Method	Source, Remark
Explosive properties			The product is not explosive

Other information
none

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Avoid temperatures above flash point.
High temperatures

10.5 Incompatible materials

Oxidising agent, strong
Strong acids
Strong bases

10.6 Hazardous decomposition products

Sulphur dioxide (SO2)
Phosphorus compounds
Nitrogen oxides (NOx)
Hydrogen sulfide (H2S)
Carbon monoxide
Carbon dioxide

Additional information
No risk of production of decomposition products when appropriately handled and stored

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol LD50: 1350 mg/kg Species Rat	OECD 401	
	3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine LD50: 500 mg/kg		
	CAS No124-28-7 dimantine LD50: 1230 mg/kg Species Rat	OECD 401	
	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based > 5000 mg/kg		
Acute dermal toxicity	CAS No124-28-7 dimantine LD50: 8000 mg/kg		
	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based > 2001 mg/kg		
Acute inhalation toxicity	not determined		

Assessment/classification
Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Practical experience/human evidence
Repeated or prolonged contact with the skin may cause skin irritation.

Animal data

Result / Evaluation	Method	Source, Remark
CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol Causes serious chemical burns Species Rabbit Exposure time 14 d	OECD 404	

Assessment/classification
Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Practical experience/human evidence
Repeated or prolonged contact with the eyes may cause eye irritation.

Animal data

Result / Evaluation	Method	Source, Remark
non-irritant.		

Assessment/classification
Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract

Assessment/classification
Based on available data, the classification criteria are not met.

Skin sensitisation

Animal data

Result / Evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol Species Guinea pig	OECD 406	

Assessment/classification
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Assessment/classification
Based on available data, the classification criteria are not met.

Carcinogenicity

Assessment/classification
Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment/classification
Based on available data, the classification criteria are not met.

STOT-single exposure

STOT SE 1 and 2

Assessment/classification
Based on available data, the classification criteria are not met.

STOT SE 3

Irritation to respiratory tract

Practical experience/human evidence
Inhaling mists and vapours at high-temperatures may cause respiratory irritation.

Assessment/classification
Based on available data, the classification criteria are not met.

Narcotic effects

Assessment/classification
Based on available data, the classification criteria are not met.

STOT-repeated exposure

Assessment/classification
Based on available data, the classification criteria are not met.

Aspiration hazard

Assessment/classification
May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Information on other hazards

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			No data available

Other information

In case of swallowing, irritations of the gastric mucous membrane, nausea, vomiting and diarrhoea may occur.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol LC50: 0.1 mg/L Test duration 96 h 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine LC50: 0.26 mg/L Test duration 96 h CAS No124-28-7 dimantine LC50: 0.26 mg/L Test duration 96 h	OECD 203	

	Effective dose	Method,Evaluation	Source, Remark
Chronic (long-term) fish toxicity	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based NOEC > 1000 mg/L Test duration 14 d		
Acute (short-term) toxicity to crustacea	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol EC50 0.043 mg/L Species Daphnia pulex (water flea) Test duration 48 h	OECD 202	
	CAS No124-28-7 dimantine EC50 0.0558 mg/L Species Daphnia pulex (water flea) Test duration 48 h		
Chronic (long-term) toxicity to aquatic invertebrate	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based NOEC 10 mg/L Species Daphnia pulex (water flea) Test duration 21 d	OECD 211	
	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol EC10 0.279 mg/L Test duration 21 d	OECD 211	
	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol EC10 0.0107 mg/L Test duration 21 d	OECD 211	
Acute (short-term) toxicity to algae and cyanobacteria	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based NOEC > 100 mg/L Test duration 72 h	OECD 201	
	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol NOEC 0.0156 mg/L Test duration 72 h		

	Effective dose	Method,Evaluation	Source, Remark
	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol EC50 0.0538 mg/L Test duration 72 h	OECD 201	
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	CAS No72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based NOEC: > 100 mg/L Species Scenedesmus quadricauda Test duration 72 h	OECD 201	
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

Assessment/classification

Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate 63 %	OECD 301D/ EEC 92/69/V, C.4-E	CAS No1218787-32-6 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol 28 d Easily biodegradable

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			No data available

12.7 Other adverse effects

Additional ecotoxicological information

Additional information

Do not allow uncontrolled discharge of product into the environment.
Do not allow to escape into waste water, into the soil or into bodies of water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product
Dispose of waste according to applicable legislation.

Appropriate disposal / Package
Dispose of waste according to applicable legislation.

Remark
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

not applicable

All transport carriers
No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

Substance safety analysis was not performed for this mixture.

! SECTION 16: Other information

Indication of changes
Current safety data sheets are available at:
https://gms.aftersales.mercedes-benz.com

! **Abbreviations and acronyms**

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
Acute Tox. 4, H302: Acute Toxicity (oral), Category 4
Skin Corr. 1B: Skin corrosion, Sub-category 1B
Skin Corr. 1C: Skin corrosion, Sub-category 1C
Eye Dam. 1: Serious eye damage, Category 1
Asp. Tox. 1: Aspiration toxicity, Category 1
Aquatic Acute 1: Short-term (acute) aquatic hazard, Category 1
Aquatic Chronic 1: Long-term (chronic) aquatic hazard, Category 1

Key literature references and sources for data

Safety data sheets of suppliers

! **Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

The mixture is classified according to the available hazard data for the constituents as defined in the classification criteria for mixtures for each hazard class in Appendix I of Regulation (EC) No 1272/2008.
Classification method:
Calculation
Test data

Additional information

Adhere to existing national and local rules referring to chemicals.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.