To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrantee or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team
Zep Inc.

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

1.1 Product identifier

Trade name/designation Automatik-Getriebeöl ATF D971

Partno A 002 989 06 03 13

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

Use
Transmission oil

1.3 Details of the supplier of the safety data sheet

Supplier
Mercedes-Benz USA, LLC.
One Mercedes-Benz Dr.
Sandy Springs, GA 30328-4312
+1 770 705 0600

Manufacturer
Mercedes-Benz AG

70546 Stuttgart
Telephone +49 (0)711 17-0

1.4 Emergency telephone number

+49 (0)711 17-0

gms.daimler.com

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]

product identifiers

Trade name/designation Automatik-Getriebeöl ATF D971

Hazard components for labelling
C18-C50 branched, cyclic and linear hydrocarbons – distillates

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

2.3 Other hazards

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
Mixture of highly refined mineral oils and additives.

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]
848301-69-9	482-220-0	C18-C50 branched, cyclic and linear hydrocarbons – distillates	65 - 75 %	Asp. Tox. 1 H304
848301-69-9	482-220-0	C18-C50 branched, cyclic and linear hydrocarbons – distillates	20 - 30 %	Asp. Tox. 1 H304

REACH No.	Substance name
01-0000020163-82	C18-C50 branched, cyclic and linear hydrocarbons – distillates
01-0000020163-82	C18-C50 branched, cyclic and linear hydrocarbons – distillates

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

Following inhalation
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
Remove contact lens
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.

After ingestion
Do NOT induce vomiting.
If vomiting occurs spontaneously, keep the head below the hips to prevent inhalation.
Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
The following symptoms may occur:
Fever
Dyspnoea
Cough
Vomiting
Nausea
diarrhea

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Risk of chemical pneumonia.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Foam
Dry extinguishing powder
Extinguishing powder
Carbon dioxide (CO2)
Water mist

Unsuitable extinguishing media
High power 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.

5.3 Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Avoid skin and eye contact.
Special danger of slipping by leaking/spilling product.

For emergency responders
Avoid skin and eye contact
Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

If stretches of water or sewerage systems become polluted, inform the relevant authorities.
Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).

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
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Do not put any product-impregnated cleaning rags into your trouser pockets.
Take precautionary measures against static discharges (earthing (grounding) at pouring)
Avoid:
Eye contact
Skin contact
Do not inhale gases/vapours/aerosols.
Adhere to general precaution rules when handling chemicals

Advices on general occupational hygiene
Thorough skin-cleansing after handling the product.
Apply skin care products after work.
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

Packaging materials:
Unsuitable material:
PVC.

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

Storage class
LGK10 Combustible liquids that cannot be assigned to any of the above storage classes

Materials to avoid
Do not store together with:
Oxidising agent

Further information on storage conditions
Keep container tightly closed in a cool, well-ventilated place.
Protect against:
Heat
Store at room temperature.

7.3 Specific end use(s)

Recommendation
See section 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	EC No.	Substance name	occupational exposure limit value
		Ölnebel	5 [mg/m3] Empfehlung

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
DIN 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:
insufficient exhaust
prolonged exposure
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
amber

Odour
slight hydrocarbon

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
pH	in delivery state		not applicable
Melting point/freezing point	-48 °C	ASTM D 97	Tolerance: ± 10%
Initial boiling point and boiling range	> 280 °C	estimated	
Flash point	210 °C	ASTM D 92	Tolerance: ± 10%
Evaporation rate	not determined		
flammability	not determined		
Upper/lower flammability or explosive limits	Upper explosion limit 10 Vol-%		
Upper/lower flammability or explosive limits	Lower explosion limit 1 Vol-%		
Vapour pressure	< 0.5 Pa (20°C)	estimated	
Vapour density	> 1	estimated	
Density	0.818- 0.825 (15°C)	ASTM D 1298	

	Value	Method	Source, Remark
Solubility(ies)	Water solubility (g/L)		practically insoluble
Partition coefficient: n-octanol/water	> 6		based on information from comparable products
Auto-ignition temperature	> 320 °C		
Decomposition temperature	not determined		
Viscosity	kinematic 18.5 mm^2/s (40°C)	ASTM D 445	Tolerance: ± 10%
Viscosity	kinematic 4- 4.25 mm^2/s (100°C)	ASTM D 445	Tolerance: ± 10%
Explosive properties:			The product is not explosive
Oxidising properties	not determined		

9.2 Other information

Other safety information
none

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions with proper storage and handling.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Reactions with strong oxidising agents.

10.4 Conditions to avoid

Ignition sources
Heat
insolation

10.5 Incompatible materials

Oxidising agent, strong

10.6 Hazardous decomposition products

None known with intended use.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Animal data

	Effective dose	Method	Source, Remark
Acute oral toxicity	> 5000 mg/kg Rat		Data obtained by analogy conclusion, e.g. (Q)SAR.
Acute dermal toxicity	> 5000 mg/kg Rabbit		Data obtained by analogy conclusion, e.g. (Q)SAR.
Acute inhalation toxicity	> 5000 mg/m^3 Rat		Data obtained by analogy conclusion, e.g. (Q)SAR.

Assessment/classification
The classification criteria have not been met according to the available data.

Skin corrosion/irritation

Assessment/classification
Based on available data, the classification criteria are not met.
Frequent or prolonged contact with the skin can degrease the skin and lead to skin complaints and dermatitis.

Eye damage/irritation

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

Sensitisation to the respiratory tract

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

Skin sensitisation

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

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

Experimental data

	Value	Method	Source, Remark
Viscosity	kinematic 18.5 mm^2/s (40°C)	ASTM D 445	Tolerance: ± 10%
Viscosity	kinematic 4- 4.25 mm^2/s (100°C)	ASTM D 445	Tolerance: ± 10%

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

Additional information

Risk of eye and respiratory tract irritation due to high temperatures of vapours and oil mist

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method	Source, Remark
Acute (short-term) fish toxicity	LC50: > 100 mg/L	estimated	
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	EC50 > 100 mg/L	estimated	
Chronic (long-term) toxicity to crustacea	not determined		
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 > 100 mg/L	estimated	
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

12.2 Persistence and degradability

Assessment/classification

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment cannot be ruled out.

12.3 Bioaccumulative potential

	Value	Method	Source, Remark
Partition coefficient: n-octanol/water	> 6		based on information from comparable products

Assessment/classification

Contains potentially bioaccumalative ingredients.

12.4 Mobility in soil

	Value	Distribution	Transport type	Method	Remark
Log KOC	> 6				based on information from comparable products

Assessment/classification

Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Floats on water.

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 Other adverse effects

Additional ecotoxicological information

Additional information

Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product	Waste name
130206 *	synthetic engine, gear and lubricating oils

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	-	-	-
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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

For bulk shipments by sea, the regulations of MARPOL Annex 1 apply.

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

National regulations

Water hazard class (WGK)
obviously hazardous to water (WGK 2)
according to the Ordinance on Facilities for Handling Substances that are Hazardous to Water (AwSV)

Kenn-Nummer: 436

Restrictions of occupation
Observe national legislation regarding professional restrictions.

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:
http://gms.aftersales.daimler.com

Abbreviations and acronyms
See overview table at www.euphrac.eu

Key literature references and sources for data
Safety data sheets of suppliers

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)

H304	May be fatal if swallowed and enters airways.