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 Getriebeöl

Partno A 001 989 51 03 10

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 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@daimler.com

Manufacturer

BP Europa SE
Überseeallee 1
20457 Hamburg
Telephone +49 (0)40 639-52222

Emergency telephone number:
Carechem: +44 (0) 1235 239 670

Trade name/designation: BOT 328
Code: 456433-DE01

1.4 Emergency telephone number

+49 (0)711 17-0

gms.daimler.com

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Remark
This mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

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

product identifiers

Trade name/designation Getriebeöl

Precautionary statements
P102 Keep out of reach of children.

Special rules for supplemental label elements for certain mixtures
EUH210 Safety data sheet available on request.

2.3 Other hazards

Adverse human health effects and symptoms
Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

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
Synthetic lubricants and additives.

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]
68649-11-6	500-228-5	dec-1-ene, dimers, hydrogenated	>= 10 < 25 %	Acute Tox. 4 H332 Asp. Tox. 1 H304
68037-01-4	500-183-1	1-decene, homopolymer, hydrogenated	>= 10 <= 25 %	Asp. Tox. 1 H304
157707-86-3	500-393-3	dec-1-ene, trimers, hydrogenated	>= 10 <= 25 %	Asp. Tox. 1 H304
verschieden*		Base oil - unspecified	<= 10 %	Asp. Tox. 1 H304

REACH No.	Substance name
01-2119493069-28	dec-1-ene, dimers, hydrogenated
01-2119486452-34	1-decene, homopolymer, hydrogenated
01-2119493949-12	dec-1-ene, trimers, hydrogenated

Additional information
* contains one or more of the following CAS numbers (REACH registration numbers):
64741-88-4 (01-2119488706-23), 64741-89-5 (01-2119487067-30), 64741-95-3 (01-2119487081-40), 64741-96-4 (01-2119483621-38), 64742-01-4 (01-2119488707-21), 64742-44-5 (01-2119985177-24), 64742-45-6, 64742-52-5 (01-2119467170-45), 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-57-0 (01-2119489287-22), 64742-58-1, 64742-62-7 (01-2119480472-38), 64742-63-8, 64742-65-0 (01-2119471299-27), 64742-70-7 (01-2119487080-42), 72623-85-9 (01-2119555262-43), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change contaminated, saturated clothing.
Never put product impregnated rags into clothing pockets

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.

After ingestion
Do NOT induce vomiting.
Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Repeated exposure may cause skin dryness or cracking.
Potential risk of temporary problems such as burning or redness from accidental contact with the eyes.
Swallowing large quantities can cause nausea and diarrhoea.

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
Foam
Dry extinguishing powder
Carbon dioxide (CO2)

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire formation of dangerous gases possible.
Carbon monoxide
Carbon dioxide (CO2)

5.3 Advice for firefighters

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

Additional information
Cool endangered containers with water spray and possibly remove them from fire site.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Avoid skin and eye contact.

For emergency responders
Keep away unprotected persons
Personal protection equipment

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

For containment
Cleanup with fluid-absorbent material (such as sand, soil, universal binder, kieselguhr and vermiculite).
Take up mechanically and send for disposal.

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 heat up to temperatures close to the flash point.
Adhere to general precaution rules when handling chemicals
Avoid:
Eye contact
Skin contact
Inhalation of vapours or spray/mists

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.

7.2 Conditions for safe storage, including any incompatibilities

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

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

Materials to avoid
Do not store together with:
Food and feedingstuffs

Further information on storage conditions
Keep container tightly closed in a cool, well-ventilated place.
Protect against:
Heat
UV-radiation/sunlight

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 goggles
DIN EN 166

Hand protection
Glove material specification [type, thickness, permeation time / wearing time, wetting resistance]: nitrile rubber, 0.35 mm, penetration time < 480 min
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:
high concentrations

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
liquid

Colour
amber

Odour
like mineral oil

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
pH	not determined		
Melting point/freezing point	not determined		
Initial boiling point and boiling range	not determined		
Flash point	> 180 °C	Cleveland	
Evaporation rate	not determined		
flammability	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	0.873 g/m3 (15°C)		
Solubility(ies)	Water solubility (g/L)		practically insoluble
Partition coefficient: n-octanol/water	not determined		
Auto-ignition temperature	not determined		
Decomposition temperature	not determined		
Viscosity	kinematic 76 cSt (40°C)		
Viscosity	kinematic 15.09 cSt (100°C)		

	Value	Method	Source, Remark
Explosive properties:	not determined		
Oxidising properties	not determined		

9.2 Other information

Further safety characteristics

	Value	Method	Source, Remark
Pour point	-54 °C		

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 stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Avoid temperatures above flash point.
Keep away from heat, flames, sparks and other sources of ignition.

10.5 Incompatible materials

Oxidising agent

10.6 Hazardous decomposition products

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 toxicological effects

Acute toxicity

Animal data

	Effective dose	Method	Source, Remark
Acute oral toxicity	LD50: > 5000 mg/kg Rat		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute oral toxicity	LD50: >= 5000 mg/kg Rat		CAS No.verschieden* Base oil - unspecified
Acute oral toxicity	> 5000 mg/kg Rat		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Acute dermal toxicity	LD50: 2001 mg/kg Rat		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated

	Effective dose	Method	Source, Remark
Acute dermal toxicity	LD50: >= 5000 mg/kg Rat		CAS No.verschieden* Base oil - unspecified
Acute dermal toxicity	LD50: > 3000 mg/kg Rabbit		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Acute inhalation toxicity	Acute inhalation toxicity (dust/mist) LC50: > 5 mg/L Rat Exposure time 4 h		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute inhalation toxicity	Acute inhalation toxicity (dust/mist) LC50: 1.17 mg/L Rat Exposure time 4 h		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated

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

Skin corrosion/irritation

Practical experience/human evidence
Frequent and prolonged contact with the skin may cause skin irritation.

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

Eye damage/irritation

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

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

Repeated dose toxicity (subacute, subchronic, chronic)

	Effective dose	Method	Specific effects:	Organs affected:	Source, Remark
Subacute oral toxicity					
Subacute dermal toxicity					
Subacute inhalation toxicity					

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 76 cSt (40°C)		
Viscosity	kinematic 15.09 cSt (100°C)		

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

Additional information

Repeated and/or long exposition may cause skin, eye or respiratory tract irritation.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method	Source, Remark
Acute (short-term) fish toxicity	LC50: > 100 mg/L Pimephales promelas (fathead minnow) Test durarion 96 h		CAS No.verschieden* Base oil - unspecified
Acute (short-term) fish toxicity	LC50: > 1000 mg/L Oncorhynchus mykiss (Rainbow trout) Test durarion 96 h		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute (short-term) fish toxicity	LC50: 5000 mg/L Oncorhynchus mykiss (Rainbow trout) Test durarion 96 h		CAS No.verschieden* Base oil - unspecified
Acute (short-term) fish toxicity	LC50: > 1000 mg/L Test durarion 96 h		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	EC50 10000 mg/L Daphnia magna (Big water flea) Test durarion 48 h		CAS No.verschieden* Base oil - unspecified

	Effective dose	Method	Source, Remark
Acute (short-term) toxicity to crustacea	EC50 > 1000 mg/L Daphnia magna (Big water flea) Test durarion 48 h	OECD 202	CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute (short-term) toxicity to crustacea	EC50 > 1000 mg/L Daphnia pulex (water flea) Test durarion 48 h		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Acute (short-term) toxicity to crustacea	NOEC 10 mg/L Daphnia pulex (water flea) Test durarion 21 d	OECD 211	CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Chronic (long-term) toxicity to crustacea	NOEC > 10 mg/L Daphnia magna (Big water flea) Test durarion 21 d		CAS No.verschieden* Base oil - unspecified
Chronic (long-term) toxicity to crustacea	EC50 125 mg/L Daphnia magna (Big water flea) Test durarion 21 d		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Chronic (long-term) toxicity to crustacea	NOEC 125 mg/L Daphnia magna (Big water flea) Test durarion 21 d		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 1000 mg/L Pseudokirchneriella subcapitata (green alga) Test durarion 72 h		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 > 100 mg/L Scenedesmus quadricauda Test durarion 72 h		CAS No.verschieden* Base oil - unspecified
Acute (short-term) toxicity to aquatic algae and cyanobacteria	NOEC > 100 mg/L Pseudokirchneriella subcapitata (green alga) Test durarion 72 h		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 > 1000 mg/L Pseudokirchneriella subcapitata (green alga) Test durarion 72 h		CAS No.68649-11-6 dec-1-ene, dimers, hydrogenated
Toxicity to other aquatic plants/organisms	EC50 > 100 mg/L Scenedesmus quadricauda (green algae) Test durarion 3 d		CAS No.verschieden* Base oil - unspecified
Toxicity to other aquatic plants/organisms	NOEC > 1000 mg/L Scenedesmus quadricauda (green algae) Test durarion 3 h		CAS No.68037-01-4 1-decene, homopolymer, hydrogenated
Toxicity to microorganisms	not determined		

12.2 Persistence and degradability

Assessment/classification
Moderately/partially biodegradable.

12.3 Bioaccumulative potential

Assessment/classification
Bioaccumulation is not expected.

12.4 Mobility in soil

Assessment/classification
Leaking substance can penetrate into the soil and lead to soil and groundwater contamination.

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
Leaking product can form a film on the surface of the water which can reduce oxygen exchange and kill organisms.
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
130208 *	other 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

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

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)

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
* Data changed compared with the previous version

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.
H332	Harmful if inhaled.