



Product name: SACHS Hochleistungsfett, High Performance Grease, Tribol GR 400-3 PD

ZF Aftermarket

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: SACHS Hochleistungsfett
SACHS High Performance Grease
Tribol GR 400-3 PD

Product code: 0671.190.050
0671.190.165
4200 080 050
4200 080 060

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

Use of the substance/mixture: Grease for industrial applications.

1.3 Details of the supplier of the safety data sheet

ZF Friedrichshafen AG
ZF Aftermarket
Obere Weiden 12
97424 Schweinfurt
Germany
+49 9721 475 60
www.zf.com /contact

1.4 Details of Australian Importer/Supplier

ZF Services Pty Limited
Unit 1, 13 Bessemer Street
Blacktown, NSW 2148
+61 2 9679 5555

1.5 Emergency telephone number **24/7h Emergency telephone number:**

Australia ZF 24/7: Tel (+1) 300 938 324 (in English)

International GBK-EMETEL: Tel (+1) 352 323 3500 (in English)

(+49) 89 19 240 (Emergency Call - Information in German and in English)

2. Hazards identification



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2.1 Classification of the substance or mixture

Product definition Mixture

The product is not classified, according to the Globally Harmonised System (GHS).

2.2 Label elements

GHS label elements	Void
Hazard pictograms	Void
Signal word	Void
Hazard statements	Void

Other hazards

Results of PBT and vPvB assessment:

PBT:	Not applicable.
vPvB:	Not applicable.

3. Substance/mixture

Chemical characterisation	Mixtures
Description	Mixture of mineral oil raffinates and additives.
Dangerous components	Void
Additional information	For the wording of the listed hazard phrases refer to section 16.

4. First aid measures

4.1 Description of first aid measures

General information	It may be dangerous to the person
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	providing aid to give mouth-to-mouth resuscitation. If victim is unconscious: Victim to lie down and be transported in the recovery position. If required, provide artificial respiration.
After inhalation	Supply fresh air; consult doctor in case of symptoms
After skin contact	The product is not skin irritating.
After eye contact	Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
After swallowing	Do not induce vomiting. In case of persistent symptoms consult doctor.

4.2 Information for doctor

Most important symptoms and effects, both acute and delayed	Dermatitis
After skin contact	Has a degreasing effect on the skin.
Indication of any immediate medical attention and special treatment needed	A symptomatic therapy is to be induced.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Foam Fire-extinguishing powder
For safety reasons unsuitable extinguishing agents	The use of a water jet may cause the fire to spread by splashing the burning product.
Special hazards arising from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products:	Pressure build-up and risk of bursting



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when heated.

Can be released in case of fire

Carbon monoxide and carbon dioxide
Metal oxides

5.3 Advice for firefighters

Protective equipment

In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.

Additional information

Collect contaminated fire fighting water separately. It must not enter drains. Provide sufficient fire fighting water retention.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.

Environmental precautions:

Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose of the material collected according to regulations.
Send for recovery or disposal in suitable containers.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.



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7. Handling and storage

7.1 Handling

Precautions for safe handling	Wear suitable protection equipment. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols
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Information about protection against explosions and fires	No special measures required.
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7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers	Store only in the original container
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Information about storage in one common storage facility	Not required
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Further information about storage conditions	Keep container tightly closed and store in a dry, cool and well ventilated place. Protect from heat and direct sunlight.
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7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
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Additional information	The lists that were valid during the compilation were used as basis.
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8.2 Exposure controls

Personal protective equipment

General protective and hygienic	Do not eat, drink or smoke while
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measures

working.

Wash hands during breaks and at the end of the work.

Do not wear contaminated clothings outside the workplace.

Ensure that washing facilities are available in the work place.

Breathing equipment

Not required when used as intended.

Use breathing protection in case of insufficient ventilation.

Protection of hands

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

In case of a layer thickness of 0.35 mm the penetration time is longer than 480 minutes.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection

Tightly sealed safety glasses.

Body protection

Wear antistatic and flame resistant clothing.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Form:	Pasty
Colour:	Dark Brown
Odour:	Characteristic
Odour threshold:	Not determined
pH:	Not determined

Melting point/freezing point	Not determined	
Initial boiling point and boiling range	Not determined	
Flash point	268°C (514.4°F)	Open cup [Estimated. Based on Lubricants - Base Oils]
Inflammability (solid, gaseous)	Not applicable	
Decomposition temperature	Not determined	
Self-inflammability	Product is not selfigniting	
Explosive properties	Product is not explosive	
Critical values for explosion Lower Upper	Not determined Not determined	
Vapour pressure	Not determined	
Density Relative density Vapour density Evaporation rate	<1000 kg/m ³ (<1 g/cm ³) at 20°C Not determined Not determined Not determined	



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Solubility in / Miscibility with Water	Not miscible or difficult to mix	
Viscosity: dynamic: kinematic:	Not determined Not determined	
Other information	No further relevant information available	

10. Stability and reactivity

10.1 Reactivity No further relevant information available

10.2 Chemical stability

Thermal decomposition / conditions to be avoided No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous decomposition products None in case of intended use and storage in compliance with instructions.

11. Toxicological information

11.1 Information on toxicological effects

Information on toxicological effects

·Acute toxicity

LD/LC50 values that are relevant for classification		
8042-47-5 White mineral oil (petroleum)		
Oral	LD50	> 5,000 mg/kg (rat) (OECD 401)



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Dermal	LD50	> 2,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50	> 5 mg/l/4h (rat) (OECD 403)
7446-19-7 zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)		
Oral	LD50	2,280 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rabbit) (OECD 402)

Additional toxicological information The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Repeated dose toxicity		
8042-47-5 White mineral oil (petroleum)		
Oral	NOAEL (90d)	> 1,900 mg/kg bw/day (rat) (OECD 408)

12. Ecological information

12.1 Toxicity

Aquatic toxicity	
8042-47-5 White mineral oil (petroleum)	
EC50 (static)	> 100 mg/l/48h (Daphnia magna) (OECD 202)
LC50 (static)	> 1,000 mg/l/96h (Oncorhynchus mykiss) (OECD 203)
NOEL (static)	> 100 mg/l/72h (Pseudokirchneriella subcapitata)
7446-19-7 zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)	
EC50	0.259 mg/l/48h (Daphnia magna)
LC50 (static)	0.78 mg/l/96h (Pimephales promelas)

12.2 Persistence and degradability

No further relevant information available.

Other information

There are no data available about the preparation.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Ecotoxic effects:

Remark

Harmful to fish



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Additional ecological information

General notes

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.
Harmful to aquatic organisms

12.6 Results of PBT and vPvB assessment

PBT

Not applicable

vPvB

Not applicable

Other adverse effects

No further relevant information available

13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings

Recommendation

Dispose of packaging according to regulations on the disposal of packagings.
Non contaminated packagings can be used for recycling.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

14 Transport information

UN-Number

ADG, IMDG, IATA

Void

UN proper shipping name



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ADG, IMDG, IATA Void

Transport hazard class(es)

ADG, ADN, IMDG

Class Void

IATA

Class Void
Not Restricted

Packing group

ADG, IMDG, IATA Void

Environmental hazards

Not applicable

Special precautions for user

Not applicable

Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Transport/Additional information

Not dangerous according to the above specifications

UN "Model Regulation"

Void

15. Regulatory information

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

Australian Inventory of Industrial Chemicals

8042-47-5 White mineral oil (petroleum)

7446-19-7 zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

26544-23-0 Isodecyl diphenyl phosphite

4306-88-1 2,6-di-tert-butyl-4-nonylphenol

Standard for the Uniform Scheduling of Medicines and Poisons

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7446-19-7

zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

Australia: Priority Existing Chemicals

None of the ingredients is listed.

National regulations

Water hazard class

Water hazard class 2 (Self-assessment): hazardous for water.

Substances of very high concern (SVHC) according to REACH, Article 57
None of the ingredients is contained.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing data specification sheet:

This Safety Data Sheet has been drawn up in cooperation with:

DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,

phone: (+49) 511 42079 - 0, reach@dekra.com.

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· Contact:

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative