

perma High temp. grease SF03

Version 1.3

Revision Date 22.08.2017

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

1.1 Product identifier

Product name : perma High temp. grease SF03

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

Use of the Substance/Mixture : Lubricant
Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

+49 9704 609-99 (Mo-Do 08:00-16:30, Fr 08:00-12:00)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

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Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : ester oil
perfluorinated polyether oil
polyurea
solid lubricant

Hazardous components

Chemical name	CAS-No. EC-No. Index- No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Polyurea	1266545-93-0 / 01-0000017719-58-0000 / 01-0000017719-58-0002 / 01-0000017719-58-0001 /	Aquatic Chronic 4; H413	>= 2.5 - < 10
Amines, C11-14- branched alkyl, monohexyl and dihexyl phosphates	80939-62-4 279-632-6 / 01-2119976322-36-XXXX	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 2.5 - < 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.

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Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Halogenated compounds
Metal oxides
Nitrogen oxides (NOx)
Oxides of phosphorus

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not get in eyes or mouth or on skin.
Do not get on skin or clothing.
Do not ingest.
Do not repack.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

7.3 Specific end use(s)

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: Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 0.2 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Acute systemic effects

PNEC

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates

: Fresh water
Value: 0.001 mg/l

Marine water
Value: 0.0001 mg/l

Sewage treatment plant
Value: 1 mg/l

Fresh water sediment
Value: 4.357 mg/kg

Marine sediment
Value: 0.435 mg/kg

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.
Filter type P

Hand protection : For prolonged or repeated contact use protective gloves.

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
In case of contact through splashing:

- : Nitrile rubber
Protective index Class 1
- Eye protection : Tightly fitting safety goggles
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Form : paste
- Colour : beige
- Odour : odourless
- Odour Threshold : No data available
- pH : No data available
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : Not applicable
- Evaporation rate : No data available
- Flammability (solid, gas) : Combustible Solids
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Vapour pressure : < 0.001 hPa, 20 °C
- Relative vapour density : No data available

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Density	: 1.21 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

Hazardous decomposition products : >280 °C danger of forming toxic pyrolysis products.

11. Toxicological information

11.1 Information on toxicological effects

Product

Acute inhalation toxicity	: This information is not available.
Skin corrosion/irritation	: This information is not available.

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Serious eye damage/eye irritation	: This information is not available.
Respiratory or skin sensitisation	: This information is not available.
Germ cell mutagenicity	
Genotoxicity in vitro	: No data available
Genotoxicity in vivo	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Teratogenicity	: No data available
Repeated dose toxicity	: This information is not available.
Aspiration toxicity	: This information is not available.
Further information	: Information given is based on data on the components and the toxicology of similar products.

Components:

Polyurea :

Acute oral toxicity	: LD50: > 2,000 mg/kg, Rat
Acute dermal toxicity	: LD50: > 2,000 mg/kg, Rat

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates :

Acute oral toxicity	: LD50: > 5,000 mg/kg, Rat, OECD Test Guideline 401
Acute dermal toxicity	: LD50: > 2,000 mg/kg, Rat, OECD Test Guideline 402, The substance or mixture has no acute dermal toxicity
Skin corrosion/irritation	: Rabbit, Result: Irritating to skin., Classification: Irritating to skin., OECD Test Guideline 404
Serious eye damage/eye irritation	: Rabbit, Result: Irritating to eyes., Classification: Irritating to eyes., OECD Test Guideline 405
Respiratory or skin sensitisation	: Guinea pig, Result: Did not cause sensitisation on laboratory animals., Classification: Did not cause sensitisation on laboratory animals.
Germ cell mutagenicity	
Genotoxicity in vitro	: Chromosome aberration test in vitro, Rodent cell line, with and without metabolic activation, Result: negative, OECD Test Guideline 473
STOT - single exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
Repeated dose toxicity	: Rat, Oral, LOAEL: 10 mg/kg, OECD Test Guideline 422
STOT - repeated exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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- Aspiration toxicity : No aspiration toxicity classification
- Further information : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

12. Ecological information

12.1 Toxicity

Product:

- Toxicity to fish : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Toxicity to daphnia and other aquatic invertebrates : No data available
- Toxicity to algae : No data available
- Toxicity to bacteria : No data available

Components:

Polyurea :

- Toxicity to fish : LC50: > 100 mg/l, 96 h

- Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates :

- Toxicity to fish : LC50: 5.5 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates : EC50: 1.2 mg/l, 48 h, Daphnia magna (Water flea), OECD Test Guideline 202

- Toxicity to algae : EC50: > 10 mg/l, 72 h, Selenastrum capricornutum (green algae), OECD Test Guideline 201

- Toxicity to bacteria : EC50: > 100 mg/l, 3 h, activated sludge

Ecotoxicology Assessment

- Acute aquatic toxicity : Toxic to aquatic life.

- Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product:

- Biodegradability : No data available
- Physico-chemical : No data available

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removability

Components:

Polyurea :

Biodegradability : Result: Not readily biodegradable.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates :

Biodegradability : 12 %, Result: Not rapidly biodegradable, OECD Test Guideline 301B

12.3 Bioaccumulative potential

Product:

Bioaccumulation :
This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.4 Mobility in soil

Product:

Mobility : No data available
Distribution among environmental compartments : No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information : Harmful to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
: Waste codes should be assigned by the user based on the application for which the product was used.
Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

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14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

No special precautions required.

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

Remarks : Not applicable for product as supplied.

15. Regulatory information

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

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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
Major Accident Hazard Legislation	:	2012/18/EU Update: Not applicable
	:	96/82/EC Update: Not applicable
Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)	:	Not applicable

15.2 Chemical safety assessment

This information is not available.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Further information

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