

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 1 of 12

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

1.1 Product identifier

Trade name: GREASE FT4 F.FLEX.SHAFTS
This safety data sheet pertains to the following products:
Article number: 86396004 - GREASE FT4 F.FLEX.SHAFTS

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

General use: Lubricating grease.
For industrial purposes only

1.3 Details of the supplier of the safety data sheet

Company name: August Rueggeberg GmbH & Co. KG
PFERD-Werkzeuge
Street/POB-No.: Hauptstraße 13
Postal Code, city: 51709 Marienheide
WWW: www.pferd.com
E-mail: info@pferd.com
Telephone: +49 (0)2264-9-0
Telefax: +49 (0)2264-9-400
Department responsible for information:
Telephone: +49 (0) 2264-9-0

1.4 Emergency telephone number

Germany: 0800-181-5313
Austria: 0800-802278
France: 0805-089352
Italy: 800-794-834
Bulgaria: 359-32571722
Poland: +48-223073296
Sweden: 020-889-215
Greece: 30-2111981153
Portugal: 800 250 250
Other EU-Countries: 1-813-248-0585

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Eye Irrit. 2; H319 Causes serious eye irritation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 2 of 12

2.2 Label elements

Labelling (CLP)



Signal word:

Warning

Hazard statements: H319 Causes serious eye irritation.

Precautionary Statements:

P264

Wash hands and face thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313

If eye irritation persists: Get medical advice/attention.

Special labelling

EUH208

Contains 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol. May produce an allergic reaction.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Mineral oil

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119480472-38-xxxx EC No. 265-166-0 CAS 64742-62-7	Residual oils (petroleum), solvent-dewaxed	90 - 95 %	not classified
REACH 01-0000017717-62-xxxx EC No. 430-930-6 CAS 1266545-64-5	Polyurea	2.5 - 10 %	Aquatic Chronic 4; H413.
REACH 01-2119493635-27-xxxx EC No. 224-235-5 CAS 4259-15-8	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	1 - 2.5 %	Eye Dam. 1; H318. Aquatic Chronic 2; H411.
REACH 01-2120795751-43-xxxx EC No. 268-820-3 CAS 68140-98-7	4-ethyl-2-(8-heptadecenyl)-2- oxazoline-4-methanol	0.25 - 1 %	Skin Sens. 1; H317. Aquatic Chronic 3; H412.

Full text of H- and EUH-statements: see section 16.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 3 of 12

Additional information: Information about Residual oils (petroleum), solvent-dewaxed (CAS No. 64742-62-7):
Contains: < 3% DMSO-extract (IP 346). Here applies the note L.

SECTION 4: First aid measures

4.1 Description of first aid measures

- In case of inhalation: Provide fresh air. Keep airway open. If unconscious and breathing is OK, place in the recovery position and seek medical advice.
- Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
- After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. May cause allergic reactions in already sensitized persons.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water mist, Alcohol resistant foam, Extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: nitrogen oxides (NO_x), sulphur oxides, Metallic oxides, Phosphorus oxides, Carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus. Use personal protection equipment.

Additional information: Hazchem-Code: -

Use fine water spray to cool endangered containers.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 4 of 12

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Avoid contact with skin and eyes. Wear personal protection equipment.

Provide adequate ventilation. Do not breathe dust/gas/mist/vapours/spray. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. In case of release, notify competent authorities.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.
Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin and eyes. Wear appropriate protective equipment.

Do not breathe dust/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product.

Wash hands and face before breaks and immediately after handling of the product. Take off contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Store in well closed containers in a cool, dry, well-ventilated area.

Store in original container only.

Protect from heat and direct sunlight.

Hints on joint storage:

Do not store together with food.

Keep away from oxidizing agents.

Storage class:

11 = Combustible solids

7.3 Specific end use(s)

No information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 5 of 12

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

Type	Limit value
France: VME	10 mg/m ³ (Dust limit value, inhalable fraction)
France: VME	5 mg/m ³ (Dust limit value, respirable fraction)
Germany: DFG Kurzzeit	2.4 mg/m ³ (Dust limit value, respirable fraction)
Germany: DFG Langzeit	0.3 mg/m ³ (Dust limit value, respirable fraction)
Germany: DFG Langzeit	4 mg/m ³ (Dust limit value, inhalable fraction)
Germany: TRGS 900 Kurzzeit	2.5 mg/m ³ (Dust limit value, respirable fraction)
Germany: TRGS 900 Kurzzeit	20 mg/m ³ (Dust limit value, inhalable fraction)
Germany: TRGS 900 Langzeit	1.25 mg/m ³ (Dust limit value, respirable fraction)
Germany: TRGS 900 Langzeit	10 mg/m ³ (Dust limit value, inhalable fraction)
Great Britain: WEL-TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
Great Britain: WEL-TWA	4 mg/m ³ (Dust limit value, respirable fraction)
Ireland: 8 hours	10 mg/m ³ (Dust limit value, inhalable fraction)
Ireland: 8 hours	4 mg/m ³ (Dust limit value, respirable fraction)

Additional information: Observe in addition any national exposure limit values!

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Wear breathing apparatus if exposed to vapours/dusts/aerosols. suitable mask with particle filter P 1/2 (EN 143).

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Avoid contact with skin and eyes.

Do not breathe dust/gas/mist/vapours/spray. Take off contaminated clothing and wash it before reuse.

When using do not eat, drink or smoke.

Wash hands before breaks and after work.

Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Do not allow to enter into ground-water, surface water or drains.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 6 of 12

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Form: pasty Colour: beige
Odour:	characteristic
Odour threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	not applicable
Evaporation rate:	No data available
Flammability:	Combustible solids
Explosion limits:	No data available
Vapour pressure:	at 20 °C: ≤ 0.001 hPa
Vapour density:	No data available
Density:	at 20 °C: 0.9 g/cm^3
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	$\geq 6 \log P(o/w)$ (Polyharnstoff) Based on the n-octanol/water partition coefficient accumulation in organisms is possible. $\geq 3.5 \log P(o/w)$ (Residual oils (petroleum), solvent-dewaxed) Based on the n-octanol/water partition coefficient accumulation in organisms is possible. at 20 °C: $3.42 \log P(o/w)$ (4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected. at 22 °C: $3.59 \log P(o/w)$ (Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing characteristics:	No data available

9.2 Other information

Additional information: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

refer to 10.3

10.2 Chemical stability

Product is stable under normal storage conditions.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 7 of 12

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Oxidising agent

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed. No decomposition when used properly.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

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

Contains 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol. May produce an allergic reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 8 of 12

Other information: Information about Polyurea:
LD50, Rat, oral: > 2000 mg/kg (OECD 401)
LD50, Rat, dermal: > 2000 mg/kg (OECD 402)
Information about Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate):
LD50, Rat, oral: 3100 mg/kg (OECD 401)
LD50, Rat, dermal: > 5000 mg/kg (OECD 402)
Information about 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
LD50, Rat, oral: >2000 mg/kg (OECD 423)
Information about Residual oils (petroleum), solvent-dewaxed:
LD50, Rat, oral: > 5100 mg/kg (OECD 401)
LD50, Rat, dermal: > 5000 mg/kg (OECD 402)

Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about Polyurea:
May cause long lasting harmful effects to aquatic life.
Algae toxicity:
EC50 *Desmodesmus subspicatus* (green algae): >100 mg/L/72h (OECD 201)
Bacterial toxicity: EC50 >1000 mg/L/3 h (OECD 209)
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): >100 mg/L/48h (OECD 202)
Fish toxicity:
LC50 *Danio rerio* (zebrafish): >100 mg/L/96h. (OECD 203)
Information about Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate):
Toxic to aquatic life with long lasting effects.
Algae toxicity:
ErC50 *Desmodesmus subspicatus* (green algae): 240 mg/L/72h (OECD 201)
Bacterial toxicity: EC50 380 mg/L/16 h
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 75 mg/L/48h (OECD 202)
Fish toxicity:
LC50 *Oncorhynchus mykiss*: 4,4 mg/L/96h. (OECD 203)
Information about Residual oils (petroleum), solvent-dewaxed:
Algae toxicity:
NOEC *Pseudokirchneriella subcapitata* (green algae): >100 mg/L/72h (OECD 201)
Daphnia toxicity:
LC50 *Daphnia magna* (Big water flea): >10000 mg/L/48h (OECD 202)
Fish toxicity:
LC50 *Pimephales promelas* (fathead minnow): >100 mg/L/96h. (OECD 203)
Information about 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
Algae toxicity:
ErC50 *Desmodesmus subspicatus* (green algae): 65.6 mg/L/72h (OECD 201)
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 69.17 mg/L/48h (OECD 202)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 9 of 12

Water Hazard Class: 1 = slightly hazardous to water

12.2 Persistence and degradability

Further details: Information about Polyurea:
Biodegradability: 10%/28 d (OECD 301F). Not easily degradable.
Information about Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate):
Biodegradability: < 5% (OECD 301D). Not easily degradable.
Information about 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
Biodegradability: 34.73 % (OECD 301B). Not easily degradable.
Information about Residual oils (petroleum), solvent-dewaxed:
Biodegradability: 3 % (OECD 301B). Not easily degradable.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
>= 6 log P(o/w) (Polyharnstoff)
Based on the n-octanol/water partition coefficient accumulation in organisms is possible.
>= 3.5 log P(o/w) (Residual oils (petroleum), solvent-dewaxed)
Based on the n-octanol/water partition coefficient accumulation in organisms is possible.
at 20 °C: 3.42 log P(o/w) (4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol)
Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
at 22 °C: 3.59 log P(o/w) (Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate))
Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 12 01 12* = Spent waxes and fats
* = Evidence for disposal must be provided.

Recommendation: Do not dispose of with household waste.
Do not allow to enter into ground-water, surface water or drains.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 10 of 12

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Marine pollutant:

no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

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

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

-

No data available

National regulations - Germany

Storage class: 11 = Combustible solids

Water Hazard Class: 1 = slightly hazardous to water

Incident regulation: The product is not subject to the Hazardous Incident Ordinance.

Information on working limitations:

Observe employment restrictions for young people.

National regulations - France

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 11 of 12

National regulations - EC member states

Labelling of packaging with <= 125mL content



Signal word:

Warning

Hazard statements: not applicable

Precautionary Statements:
not applicable

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H317 = May cause an allergic skin reaction.

H318 = Causes serious eye damage.

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.

EUH208 = Contains 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol. May produce an allergic reaction.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830



GREASE FT4 F.FLEX.SHAFTS

Product number 147

Revision date: 6/8/2020
Version: 8

Language: en-GB,DE,FR,IE

Date of print: 10/8/2020
Page: 12 of 12

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC50: Effective Concentration 50%
EC: European Community
EN: European Standard
EU: European Union
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LC50: Median lethal concentration
LD50: Lethal dose 50%
log P(o/w): Partition coefficient: octanol/water
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
NOEC: No Observed Effect Concentration
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TSCA: Toxic Substance Control Act
vPvB: Very persistent and very bioaccumulative

Reason of change: Changes in section 1: emergency phone number Portugal
Date of first version: 2/1/2013

Department issuing data sheet

Contact person: see section 1: Department responsible for information

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.