

1 Identification

- **Product identifier**
- **Trade name:** FETT 2000
- **Application of the substance / the mixture**
Grease
Only for proper handling.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MOTOREX AG
Bern-Zürich-Strasse 31, Postfach
CH-4901 Langenthal
Tel. +41 (0)62 919 75 75
www.motorex.com
- **Information department:** msds@motorex.com
- **Emergency telephone number:**
USA + Kanada: 1 800 424 9300 (Chemtrec Chemical Manufacturers Association, Arlington, VA 22209)

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**
- | | | |
|------------|----|----------------|
| HEALTH | *0 | Health = *0 |
| FIRE | 1 | Fire = 1 |
| REACTIVITY | 0 | Reactivity = 0 |

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 68457-79-4 EINECS: 270-608-0	Phosphorus dithionic acid, mixed O, O-bis (isobutyl and pentyl) ester, zinc salts Eye Damage 1, H318; Aquatic Chronic 2, H411; Skin Irritation 2, H315; Aquatic Acute 2, H401	1%
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Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 1)

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove contaminated clothing immediately.
Remove residues with soap and water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Do not induce vomiting. Do not take in resorption stimulating agents.
Consult a physician who will decide on need and method of emptying the stomach.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** DO NOT USE WATER JET
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Protective Action Criteria for Chemicals**

· PAC-1:

None of the ingredients is listed.

· PAC-2:

None of the ingredients is listed.

· PAC-3:

None of the ingredients is listed.

- **Reference to other sections**

No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.

(Contd. on page 3)

Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 2)

- **Further information about storage conditions:**
The recommended storage temperature is (deg.C): $\leq 50^{\circ}\text{C}$
Store containers closed and protect against rain, dust, heat and other atmospheric influences.
- **Storage class:** 11
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **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.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Additional information about design of technical systems:** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:**
Not necessary if room is well-ventilated.
Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.
- **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**
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**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Color:** Green
- **Odor:** weak
- **Odor threshold:** Not determined.
- **Melting point/Melting range:** $>150^{\circ}\text{C}$ ($>302^{\circ}\text{F}$)
- **Boiling point/Boiling range:** $>250^{\circ}\text{C}$ ($>482^{\circ}\text{F}$) (DIN EN ISO 3405)
- **Flammability (solid, gaseous):** Not determined.
- **Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** $>200^{\circ}\text{C}$ ($>392^{\circ}\text{F}$)
- **Decomposition temperature:** Not determined.

(Contd. on page 4)

US

Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 3)

· pH-value:	Not applicable.
· Viscosity:	NLGI 2
· Kinematic:	Not applicable.
· Consistency	
· Dynamic:	Not applicable.
· Solubility in / Miscibility with	
· Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Vapor pressure:	Not applicable.
· Density at 20 °C (68 °F):	0.93 g/cm ³ (7.761 lbs/gal) (ASTM D 4052)
· Relative density	Not determined.
· Vapor density	Not applicable.

· Other information	
· Appearance:	
· Form:	Pasty
· Important information on protection of health and environment, and on safety.	
· Danger of explosion:	Product does not present an explosion hazard.
· Solvent separation test	
· VOC content:	0.00 %
· Change in condition	
· Drip point:	150 °C (302 °F)
· Evaporation rate	Not applicable.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

68457-79-4 Phosphorus dithionic acid, mixed O, O-bis (isobutyl and pentyl) ester, zinc salts

Oral	LD50	3,600 mg/kg (rat)
	NOEL	40 mg/kg/24h (rat)
	NOAEL	160 mg/kg/24h (rat)
Dermal	LD50	20,000 ml/kg (rabbit)

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

(Contd. on page 5)

Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 4)

 · **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

 · **Toxicity**

 · **Aquatic toxicity:**
68457-79-4 Phosphorus dithionic acid, mixed O, O-bis (isobutyl and pentyl) ester, zinc salts

LC50	46 mg/l/96h (fish)
EC50	10,000 mg/l/3h (microorganisms)
LL50	4.5 mg/l/96h (fish)
EL50	23 mg/l/48h (aquatic invertebrates)
EL50	21-24 mg/l/72h (algae / cyanobacteria)
NOEC	0.4-0.8 mg/l/21d (aquatic invertebrates)
NOELR	1.8 mg/l/96h (fish)
NOELR	10 mg/l/48h (aquatic invertebrates)
LOEC	0.8 mg/kg/28d (aquatic invertebrates)

 · **Persistence and degradability** No further relevant information available.

 · **Bioaccumulative potential**
68457-79-4 Phosphorus dithionic acid, mixed O, O-bis (isobutyl and pentyl) ester, zinc salts

Partition coefficient 0.69 [---] (log Kow) (Bioaccumulation)

 · **Mobility in soil** No further relevant information available.

 · **Results of PBT and vPvB assessment**

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

 · **Other adverse effects**

 · **Additional ecological information:**

 · **General notes:**

Water hazard class 1 (according to Appendix 1 AwSV): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

 · **Waste treatment methods**

 · **Recommendation:**

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

Contact waste processors for recycling information.

Return product and/or partially emptied container in original packaging to the point of sale or hand it over to a collection point for special waste.

 · **Uncleaned packagings:**

 · **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

 · **UN-Number**

 · **DOT, ADR/RID/ADN, ADN, IMDG, IATA** Void

(Contd. on page 6)

Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 5)

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|---|-----------------|
| · UN proper shipping name
· DOT, ADR/RID/ADN, ADN, IMDG, IATA | Void |
| · Transport hazard class(es)
· DOT, ADR/RID/ADN, ADN, IMDG, IATA
· Class | Void |
| · Packing group
· DOT, ADR/RID/ADN, IMDG, IATA | Void |
| · Environmental hazards:
· Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

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

No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

(Contd. on page 7)

Printing date 10/24/2022

Reviewed on 10/24/2022

Trade name: FETT 2000

(Contd. of page 6)

· **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

· **Department issuing SDS:** Abteilung Produktsicherheit

· **Date of preparation / last revision** 10/24/2022

· **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

DOT: US Department of Transportation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· * **Data compared to the previous version altered.**

US