

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

### 1.1 Product identifier

**Transfer Case Lubricant TF-1**  
**Article number: 170367**

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

#### 1.2.1 Relevant uses

Gearbox oil

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

**Company** Ferdinand Bilstein GmbH + Co. KG  
Wilhelmstr. 47  
58256 Ennepetal / GERMANY  
Phone +49 2333 911-0  
Fax +49 2333 911-444  
Homepage [www.febi.com](http://www.febi.com)  
E-mail [info@febi.com](mailto:info@febi.com)

#### Address enquiries to

**Technical information** [info@febi.com](mailto:info@febi.com)

**Safety Data Sheet** [info@febi.com](mailto:info@febi.com)

### 1.4 Emergency telephone number

**Advisory body** Call NHS 111 or a doctor  
+49 (0)89-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

No classification.

### 2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

**Hazard pictograms** none

**Signal word** none

**Hazard statements** none

**Precautionary statements** none

**Special labelling** EUH210 Safety data sheet available on request.

### 2.3 Other hazards

**Physico-chemical hazards** No particular hazards known.

**Human health dangers** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Environmental hazards** 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.

**Other hazards** Further hazards were not determined with the current level of knowledge.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable

**Ferdinand Bilstein GmbH + Co. KG**

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0

Page 2 / 11

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
50 - < 100	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
	CAS: 72623-87-1, EINECS/ELINCS: 276-738-4, EU-INDEX: 649-483-00-5, Reg-No.: 01-2119474889-13-XXXX
	GHS/CLP: Asp. Tox. 1: H304

#### Comment on component parts

For full text of H-statements and R-phrases: see SECTION 16.  
Contains less than 3% w/w DMSO-extract (only for mineral oils)

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Change soaked clothing.

#### Inhalation

Ensure supply of fresh air.  
In the event of symptoms seek medical treatment.

#### Skin contact

In case of contact with skin wash off immediately with plenty of water.  
Consult a doctor if skin irritation persists.

#### Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

#### Ingestion

Consult a doctor immediately.  
Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.

### 4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.  
Forward this sheet to your doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam, dry powder, water spray jet, carbon dioxide

#### Extinguishing media that must not be used

Full water jet.

### 5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)  
Sulphur oxides (SO<sub>x</sub>).  
Nitrogen oxides (NO<sub>x</sub>).

### 5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.  
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.  
Forms slippery surfaces with water.

### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.



Ferdinand Bilstein GmbH + Co. KG

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0 Page 3 / 11

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. oil binder).  
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures necessary if used correctly.  
Use only in well-ventilated areas.  
Use solvent-resistant equipment.

Do not eat, drink or smoke when using this product.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
Use barrier skin cream.  
Cloths contaminated with product should not be kept in trouser pockets.  
Take off contaminated clothing and wash before reuse.  
Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with oxidizing agents.  
Keep container tightly closed.  
Keep container in a well-ventilated place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (UK)

not relevant

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

DNEL

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³
Industrial, inhalative, Long-term - local effects, 5.58 mg/m³
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, oral, Long-term - systemic effects, 0.74mg/kg bw/day

PNEC

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
oral (food), 9.33 mg/kg food

**Ferdinand Bilstein GmbH + Co. KG**

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0

Page 4 / 11

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. General exposure limit for oil mist should be noted. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. Nitrile butyl rubber (NBR) > 0,38 mm.; (EN 374-1/-2/-3).
<b>Skin protection</b>	Light protective clothing.
<b>Other</b>	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	not applicable
<b>Thermal hazards</b>	No information available.
<b>Delimitation and monitoring of the environmental exposition</b>	Comply with applicable environmental regulations limiting discharge to air, water and soil.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	liquid
<b>Form</b>	liquid
<b>Color</b>	light brown
<b>Odor</b>	characteristic
<b>Odour threshold</b>	No information available.
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not applicable
<b>Boiling point or initial boiling point and boiling range [°C]</b>	No information available.
<b>Flash point [°C]</b>	170
<b>Flammability</b>	Not highly flammable.
<b>Lower explosion limit</b>	No information available.
<b>Upper explosion limit</b>	No information available.
<b>Oxidising properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	No information available.
<b>Density [g/cm³]</b>	0,84 (15 °C / 59,0 °F)
<b>Relative density</b>	not determined
<b>Bulk density [kg/m³]</b>	not applicable
<b>Solubility in water</b>	immiscible
<b>Solubility other solvents</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	No information available.
<b>Kinematic viscosity</b>	29,5 mm²/s (40°C)
<b>Relative vapour density</b>	No information available.
<b>Melting point [°C]</b>	No information available.
<b>Auto-ignition temperature [°C]</b>	not applicable
<b>Decomposition temperature [°C]</b>	No information available.
<b>Particle characteristics</b>	not applicable

### 9.2 Other information

none

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

See SECTION 10.3.

### **10.2 Chemical stability**

The product is stable under standard conditions.

### **10.3 Possibility of hazardous reactions**

Reactions with strong oxidizing agents.

### **10.4 Conditions to avoid**

No special measures necessary.

### **10.5 Incompatible materials**

Strong oxidizing agent.  
Strong basic compounds  
Strong acids.

### **10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity

Product
oral, Based on the available information, the classification criteria are not fulfilled.
Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, oral, Rat, > 5000 mg/kg bw

#### Acute dermal toxicity

Product
dermal, Based on the available information, the classification criteria are not fulfilled.
Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit, > 5000 mg/kg bw

#### Acute inhalational toxicity

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.
Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LC50, inhalative, Rat, > 5 mg/L, 4h

#### Serious eye damage/irritation

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Eye, non-irritating

#### Skin corrosion/irritation

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
dermal, non-irritating

#### Respiratory or skin sensitisation

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
dermal, non-sensitizing

#### Specific target organ toxicity — single exposure

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

#### Specific target organ toxicity — repeated exposure

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> air
LOAEL, oral, Rat, 125 mg/kg bw/day

#### Mutagenicity

Does not contain a relevant substance that meets the classification criteria.

**Ferdinand Bilstein GmbH + Co. KG**

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0

Page 7 / 11

Based on the available information, the classification criteria are not fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
in vitro, negativ

**Reproduction toxicity** Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

**- Fertility**

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEL, oral, Rat, 1000 mg/kg bw/day

**- Development** No information available.

**Carcinogenicity** Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

**Aspiration hazard** Based on the available information, the classification criteria are not fulfilled.

**General remarks**

Toxicological data of complete product are not available.  
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties** Contains no ingredients with endocrine-disrupting properties.

**11.2.2 Other information** none

**SECTION 12: Ecological information**

Product
---------

**12.1 Toxicity**

Based on the available information, the classification criteria are not fulfilled.
--

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
EL50, (48h), Invertebrates, > 10000 mg/L
LL50, (4d), Fish, > 100 mg/L

**12.2 Persistence and degradability**

**Behaviour in environment compartments** not determined

**Behaviour in sewage plant** not determined

**Biological degradability** not determined

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
(28d), 1 - 4 %, OECD 301 B, The product is not readily biodegradable.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.



Ferdinand Bilstein GmbH + Co. KG

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0 Page 8 / 11

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.  
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product	In according to RoHS! Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	130205* mineral-based non-chlorinated engine, gear and lubricating oils
Contaminated packaging	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.
Waste no. (recommended)	150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"



**Ferdinand Bilstein GmbH + Co. KG**

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0

Page 9 / 11

**14.3 Transport hazard class(es)**

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

**14.4 Packing group**

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

**14.5 Environmental hazards**

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

**14.7 Maritime transport in bulk according to IMO instruments**

not applicable



Ferdinand Bilstein GmbH + Co. KG

Date printed 25.03.2025, Revision 25.03.2025

Version 6.0. Supersedes version: 5.0 Page 10 / 11

SECTION 15: Regulatory information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>EEC-REGULATIONS</b>	2008/98/EG (2000/532/EC ); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 2024/573; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are restricted. According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is not subject to any restrictions.
<b>TRANSPORT-REGULATIONS</b>	ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)
<b>NATIONAL REGULATIONS (UK):</b>	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	not relevant
<b>15.2 Chemical safety assessment</b>	
For this product a chemical safety assessment has not been carried out.	

SECTION 16: Other information

<b>16.1 Hazard statements (SECTION 3)</b>	H304 May be fatal if swallowed and enters airways.
---	--

## 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
ATE = acute toxicity estimate  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
IVIS = In vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
TLV®/TWA = Threshold limit value – time-weighted average  
TLV®STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

## 16.3 Other information

Classification procedure

Modified position

1.3, 2.3, 3.2, 8.1, 9.1, 11.1, 15.1, 16.2, 16.3