

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

### 1.1 Product identifier

**grease**  
**Article number: 02582**

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

#### 1.2.1 Relevant uses

Lubricant

#### 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** +49 (0)89-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Skin Sens. 1: H317 May cause an allergic skin reaction.

### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

#### Hazard pictograms



#### Signal word

WARNING

#### Contains:

Naphthenic acids, zinc salts, basic, CAS: 84418-50-8

#### Hazard statements

H317 May cause an allergic skin reaction.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P261 Avoid breathing vapors/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

### 2.3 Other hazards

#### Human health dangers

Has a degreasing effect on the skin.

#### Environmental hazards

Does not contain any PBT or vPvB substances.  
Contains no ingredients with endocrine-disrupting properties.

#### Other hazards

Further hazards were not determined with the current level of knowledge.  
This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

### SECTION 3: Composition / Information on ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
0,1 - < 1	Naphthenic acids, zinc salts, basic
	CAS: 84418-50-8

Comment on component parts

For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

Take off contaminated clothing and wash before reuse.

##### Inhalation

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

##### Skin contact

When in contact with the skin, clean with soap and 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

Seek medical advice immediately.  
Do not induce vomiting.  
Rinse mouth.

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

Irritant effects  
Allergic reactions

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

Treat symptomatically.  
Forward this sheet to the 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

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

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

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

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.  
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.  
Avoid formation of oil dust.

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

### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with food and animal food/diet.  
Do not store together with oxidizing agents.  
Keep container tightly closed.  
Keep in a cool place.  
Protect from heat/overheating.

### 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 (US)

Not applicable

#### DNEL

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
There are no DNEL values established for the substance.

#### PNEC

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
freshwater, 6,39 µg/L
seawater, 0,64 µg/L
sewage treatment plants (STP), 147,73 µg/L
sediment (freshwater), 31,93 mg/kg Sediment dw
sediment (seawater), 3,19 mg/kg Sediment dw
soil, 6,38 mg/kg Boden dw

### 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. 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. General limit for oil mist should be noted.
<b>Eye protection</b>	If there is a risk of splashing: safety glasses (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,38 mm; Nitrile rubber, >480 min (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. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	Not required under normal conditions.
<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

Physical state	Solid
Form	pasty
Color	black
Odor	characteristic
Odor threshold	No information available.
pH-value	Not applicable
pH-value [1%]	Not applicable
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	> 150
Flammability	Combustible
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Oxidizing properties	None
Vapor pressure/gas pressure [kPa]	No information available.
Density [g/cm <sup>3</sup> ]	< 1,0 (25 °C)
Relative density	Not determined
Bulk density [kg/m <sup>3</sup> ]	Not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	> 22,5 mm <sup>2</sup> /s (40 °C)
Relative vapour density	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

### 9.2 Other information

Operation temperature: -30°C - +130°C

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

### 10.4 Conditions to avoid

Sensitive to moisture  
Strong heating.



**10.5 Incompatible materials**

Oxidizing agent

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Product
oral, Based on the information available, the classification criteria have not been fulfilled.
Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
LD50, oral, Rat, > 2000 mg/kg bw

#### Acute dermal toxicity

Product
dermal, Based on the information available, the classification criteria have not been fulfilled.
Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
LD50, dermal, Rat, > 2000 mg/kg bw

#### Acute inhalational toxicity

Product
inhalative, Based on the information available, the classification criteria have not been fulfilled.
Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
LC50, inhalative, Rat, > 0.42 mg/l/4h

**Serious eye damage/irritation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
Eye, Rabbit, OECD 405, non-irritating

**Skin corrosion/irritation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
dermal, Rabbit, OECD 404, non-irritating

**Respiratory or skin sensitisation** May cause an allergic skin reaction.  
Based on the information available, the classification criteria have been fulfilled.  
Calculation method

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
dermal, Guinea pig, OECD 406, sensitising

**Specific target organ toxicity — single exposure** Based on the information available, the classification criteria have not been fulfilled.

**Specific target organ toxicity — repeated exposure** Based on the information available, the classification criteria have not been fulfilled.

Substance
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Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
NOAEL, oral, Rat, 50 mg/kg bw/day

**Mutagenicity** Based on the information available, the classification criteria have not been fulfilled.

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
InVitro, OECD 471, negativ
InVivo, OECD 474, negativ

**Reproduction toxicity** Based on the information available, the classification criteria have not been fulfilled.

**- Fertility**

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
NOAEL, oral, Rat, 250 mg/kg bw/day

**- Development**

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
NOAEL, oral, Rat, 188 mg/kg bw/day

**Carcinogenicity** Based on the information available, the classification criteria have not been fulfilled.

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

**General remarks**

Toxicological data of complete product are not available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product
Based on the information available, the classification criteria have not been fulfilled.

Substance
Naphthenic acids, zinc salts, basic, CAS: 84418-50-8
LC50, (4d), fish, 112 - 5620 µg/L
EC50, (48h), Invertebrates, 155 - 20 000 µg/L
EC50, (72h), Algae, 3,62 - 29,6 mg/L

**12.2 Persistence and degradability**

<b>Behaviour in environment compartments</b>	Not determined
<b>Behaviour in sewage plant</b>	Not determined
<b>Biological degradability</b>	Not determined

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.



### 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

Ecotoxicological data are not available.

Do not discharge product unmonitored into the environment or into the drainage.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Coordinate disposal with the authorities if necessary.

Disposal in an incineration plant in accordance with the regulations of the local authorities.

#### Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as for product.

#### RCRA Hazard Class (40CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

## SECTION 14: Transport

### 14.1 UN 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

DOT Road Shipment Information (49 CFR) Not applicable



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**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"
DOT Road Shipment Information (49 CFR)	Not applicable

**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
DOT Road Shipment Information (49 CFR)	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
DOT Road Shipment Information (49 CFR)	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

DOT Road Shipment Information (49 CFR) No

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

Not applicable

### SECTION 15: Regulatory information

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

##### US Regulations

##### National regulations

29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

- SARA, 302

This product does not contain any ingredients regulated under this list.

- SARA, 311

This product does not contain any ingredients regulated under this list.

- SARA, 313

This product does not contain any ingredients regulated under this list.

- CA Proposition 65

No components require labeling under California Proposition 65.

- TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

- FDA

##### American Conference of Governmental Industrial Hygienists - ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

##### International Agency for Research on Cancer IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### National Toxicology Program - NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

##### HAP-VOC

< 3 g/l

##### Transport-regulations

DOT-Classification, ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;  
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;  
CAS = Chemical Abstracts Service;  
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;  
CFR = Code of Federal Regulations;  
CPR = Controlled Products Regulations;  
DMEL = Derived Minimum Effect Level;  
DNEL = Derived No Effect Level;  
DOT = Department of Transportation;  
EC50 = Median effective concentration;  
EPA = Environmental Protection Agency;  
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;  
IARC = International Agency of Research on Cancer;  
IATA = International Air Transport Association;  
TSCA = Toxic Substance Control Act;  
HMIS = Hazardous Materials Identification System;  
NFPA = National Fire Protection Association;  
NIOSH = National Institute for Occupational Safety and Health;  
OSHA = Occupational Safety and Health Administration;  
LC50 = Lethal concentration, 50%;  
LD50 = Median lethal dose, 50%;  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;  
PBT = Persistent, Bioaccumulative and Toxic substance;  
PNEC = Predicted No-Effect Concentration;  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;  
SARA = Superfund Amendments and Reauthorization Act;  
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;

### 16.2 Ratings

**NFPA Ratings**



TOP, FLAMMABILITY: 1 - Slight Hazard  
LEFT, HEALTH: 2\*- Moderate chronic Hazard  
RIGHT, REACTIVITY: 0 - Minimal Hazard  
BOTTOM, SPECIAL NOTICE:

**HMIS Ratings**

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

2\*- Moderate chronic Hazard  
1 - Slight Hazard  
0 - Minimal Hazard  
B - Safety Glasses and Gloves

**PERSONAL PROTECTION:**

- A - Safety Glasses
- B - Safety Glasses and Gloves
- C - Safety Glasses, Gloves and Protection Apron
- D - Face Shield, Gloves and Protection Apron
- E - Safety Glasses, Gloves and Dust Respirator
- F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
- G - Safety Glasses, Gloves and Vapor Respirator.
- H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
- I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
- J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
- K - Airline Mask or Hood, Gloves, Full Suit and Boots.
- X - Personal protection rating to be supplied by user depending on use conditions

**Modified position**

1.3, 3.2, 4.2, 6.1, 7.2, 8.1, 8.2, 9.1, 9.2, 10.4, 11.1, 11.2, 12.6, 12.7, 15.1, 16.2, 16.3