

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

### 1.1 Product identifier

**grease**  
**Article number: 03630**

### 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

For all uses not specified in SECTION 1.2.1

### 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)  
**Company** +49 2333 911-0

## 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.

Contains: 5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione. EUH208 May produce an allergic reaction.

### 2.3 Other hazards

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

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

**Other hazards** none

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
1 - < 5	Dilithium azelate
	CAS: 38900-29-7, EINECS/ELINCS: 254-184-4, Reg-No.: 01-2120119814-57-XXXX
	GHS/CLP: Acute Tox. 4: H302
0.1 - < 1	5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione
	CAS: 72676-55-2, EINECS/ELINCS: 276-763-0, Reg-No.: 01-2120119820-64-XXXX
	GHS/CLP: Skin Sens. 1B: H317 - Aquatic Chronic 2: H411

**Comment on component parts** Contains less than 3% w/w DMSO-extract (only for mineral oils)  
All chemical substances in this material are included on or exempted from listing on the IECSC Inventory.  
Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.  
For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>General information</b>	Change soaked clothing.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	Seek medical advice immediately. Do not induce vomiting.

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

No information available.

### 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

<b>Suitable extinguishing media</b>	Foam, dry powder, water spray jet, carbon dioxide
<b>Extinguishing media that must not be used</b>	Full water jet

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

Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)  
Nitrogen oxides (NOx).

### 5.3 Advice for firefighters

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

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.

Do not eat, drink or smoke when using this product.  
Use barrier skin cream.  
Wash face and/or hands before break and end of work.  
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.

### 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 (GB)**

not relevant

**DNEL**

Substance
Dilithium azelate, CAS: 38900-29-7
Industrial, dermal, Long-term - local effects, 172 µg/cm <sup>2</sup>
general population, dermal, Acute - systemic effects, 23 µg/cm <sup>2</sup>
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
Industrial, dermal, Long-term - systemic effects, 0.93 mg/kg bw/d (AF=300)
Industrial, inhalative, Long-term - systemic effects, 3.29 mg/m <sup>3</sup> (AF=75)
general population, oral, Long-term - systemic effects, 0.17 mg/kg bw/d (AF=600)
general population, inhalative, Long-term - systemic effects, 0.56 mg/m <sup>3</sup> (AF=150)
general population, dermal, Long-term - systemic effects, 0.33 mg/kg bw/d (AF=600)

**PNEC**

Substance
Dilithium azelate, CAS: 38900-29-7
seawater, 2.3 µg/L
freshwater, 23 µg/L
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
soil, 0.006 mg/kg dw
sediment (seawater), 0.004 mg/kg dw
sediment (freshwater), 0.039 mg/kg dw
sewage treatment plants (STP), 0.31 mg/L (AF=10)
seawater, 0 mg/L (AF=10 000)
freshwater, 0.003 mg/L (AF=1000)

**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.
<b>Eye protection</b>	If there is a risk of splashing: safety glasses
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. > 0.4 mm; Nitrile rubber, >480 min (EN 374-1/-2/-3). > 0.4 mm; Neoprene, >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
Odour threshold	not relevant
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm <sup>3</sup> ]	0.94 (DIN 51757) (25°C / 77,0°F)
Relative density	not determined
Bulk density [kg/m <sup>3</sup> ]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	NGLI 1
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	not applicable
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

### 9.2 Other information

Drop point: 220°C - 300°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 acids, alkalis and oxidizing agents.

### 10.4 Conditions to avoid

No special measures necessary.

### **10.5 Incompatible materials**

Oxidizing agent  
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
ATE-mix, oral, 59 363 mg/kg bw
Substance
Dilithium azelate, CAS: 38900-29-7
LD50, oral, Rat, 300 mg/kg bw
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
LD50, oral, Rat, > 2000 mg/kg

**Acute dermal toxicity**

Product
dermal, Based on the available information, the classification criteria are not fulfilled.
Substance
Dilithium azelate, CAS: 38900-29-7
LD50, dermal, Rat, 2000 mg/kg bw
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
LD50, dermal, Rabbit, > 2000 mg/kg

**Acute inhalational toxicity**

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

**Serious eye damage/irritation**

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

Substance
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
no adverse effect observed

**Skin corrosion/irritation**

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

Substance
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
no adverse effect observed

**Respiratory or skin sensitisation**

May produce an allergic reaction.  
Calculation method

Substance
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
dermal, sensitising

**Specific target organ toxicity —  
single exposure**

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

**Specific target organ toxicity —  
repeated exposure**

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

Substance
Dilithium azelate, CAS: 38900-29-7

NOAEL, dermal, Rat, 230 µg/cm <sup>2</sup> (local effects), adverse effect observed
NOAEL, dermal, Rat, 298 mg/kg bw/day (systemic effects), no adverse effect observed

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

Substance
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
in vivo, negativ
in vitro, positive

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

**- Fertility**

Substance
Dilithium azelate, CAS: 38900-29-7
NOAEL, Rat, 298.5 mg/kg bw/d (Effect on developmental toxicity, no adverse effect observed)
NOAEL, Rat, 298.5 mg/kg bw/d (Effect on fertility), no adverse effect observed
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
NOAEL, oral, Rat, 300 mg/kg bw/d (Effect on fertility)

**- Development**

Substance
Dilithium azelate, CAS: 38900-29-7
NOAEL, Rat, 298.5 mg/kg bw/d (Effect on developmental toxicity, no adverse effect observed)
NOAEL, Rat, 298.5 mg/kg bw/d (Effect on fertility), no adverse effect observed
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
NOAEL, oral, Rat, 300 mg/kg bw/d (Effect on fertility)

**Carcinogenicity** 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**

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

**Other information** none



## SECTION 12: Ecological information

### 12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
Dilithium azelate, CAS: 38900-29-7
LC50, (96h), fish, 100 mg/L
EC50, (72h), Algae, 23 mg/L
EC50, (48h), Crustacea, 100 mg/L
5,5'-Dithiodi-1,3,4-thiadiazole-2(3H)-thione, CAS: 72676-55-2
LC50, (96h), Pimephales promelas, > 454 mg/L
EC50, (72h), Pseudokirchneriella subcapitata, 20 mg/L
EC50, (48h), Daphnia magna, 3 mg/L

### 12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	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.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

### 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!  
Coordinate disposal with the authorities if necessary.  
Disposal in an incineration plant in accordance with the regulations of the local authorities.

**Waste no. (recommended)** 120112\* spent waxes and fats

##### 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  
150102  
150104

### 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"

#### 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

### SECTION 15: Regulatory information

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

EEC-REGULATIONS 2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.

- Observe employment restrictions for people no

- VOC (2010/75/CE) not relevant

#### 15.2 Chemical safety assessment

not applicable

### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 3)

H411 Toxic to aquatic life with long lasting effects.  
H317 May cause an allergic skin reaction.  
H302 Harmful if swallowed.

## 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

SECTION 11 been added: Contains no ingredients with endocrine-disrupting properties.

SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.