

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

### 1.1 Product identifier

**automatic transmission fluid**  
**Article number: 39095, 39096, 39097, 39098, 107393**

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

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.  
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:

4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat, CAS: 93882-40-7

#### Hazard statements

H412 Harmful to aquatic life with long lasting effects.  
H317 May cause an allergic skin reaction.

#### Precautionary statements

P273 Avoid release to the environment.  
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 Wear protective gloves.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 2 / 14

**2.3 Other hazards**

<b>Physico-chemical hazards</b>	No particular hazards known.
<b>Human health dangers</b>	Frequent persistent contact with the skin can cause skin irritation.
<b>Environmental hazards</b>	Does not contain any PBT or vPvB substances. Contains no ingredients with endocrine-disrupting properties.
<b>Other hazards</b>	None  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
50 - < 100	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based CAS: 72623-87-1
1 - < 5	Phenol derivates
1 - < 5	Bis(nonylphenyl)amine CAS: 36878-20-3
0,1 - < 1	4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat CAS: 93882-40-7
0,01 - 0,25	Alkyl thiophosphites

**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**

<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>	In case of contact with skin wash off immediately 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>	Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Get medical advice.

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

Irritant effects

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

If swallowed or in the event of vomiting, risk of product entering the lungs.  
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

Not combusted hydrocarbons.  
Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)

### 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

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.

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

Take up residues with absorbent material (e.g. sand).  
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.  
The product is combustible.  
Do not eat, drink or smoke when using this product.  
Use barrier skin cream.  
Wash hands before breaks and after 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.  
Keep container tightly closed.  
Protect from heat/overheating.

### 7.3 Specific end use(s)

See product use, SECTION 1.2



Ferdinand Bilstein GmbH + Co. KG

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 4 / 14

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Ingredients with occupational exposure limits to be monitored (US)**

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
CAS: 72623-87-1
Long-term exposure: 5 mg/m <sup>3</sup> , ACGIH, TWA, Oil mist

**DNEL**

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
Industrial, dermal, Long-term - systemic effects, 5 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 2,5 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,25 mg/kg bw/day
Alkyl thiophosphites
Industrial, inhalative, Long-term - systemic effects, 1,76 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 0,5 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0,43 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 0,25 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,25 mg/kg bw/day
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup>
Industrial, inhalative, Long-term - local effects, 5.58 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, inhalative, Long-term - local effects, 1.19 mg/m <sup>3</sup>
general population, inhalative, Long-term - systemic effects, 740 µg/kg bw/day
4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat, CAS: 93882-40-7
Industrial, inhalative, Long-term - systemic effects, 3.526 mg/m <sup>3</sup> (AF= 75)
Industrial, dermal, Long-term - systemic effects, 2 mg/kg bw/d (AF= 300)
general population, oral, Long-term - systemic effects, 0.5 mg/kg bw/d (AF= 600)

**PNEC**

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
freshwater, 412 µg/L
seawater, 41.2 µg/L
sediment (freshwater), 1 mg/kg sediment dw
sediment (seawater), 0.1 mg/kg sediment dw
Alkyl thiophosphites
freshwater, 900 ng/l
seawater, 90 ng/l
sewage treatment plants (STP), 54 mg/l
sediment (freshwater), 0,073 mg/kg
sediment (seawater), 0,007 mg/kg
soil, 0,015 mg/kg
oral (food), 10 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1



**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 5 / 14

oral (food), 9.33 mg/kg food
4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat, CAS: 93882-40-7
freshwater, 0.009 mg/L (AF= 1000)
seawater, 0.001 mg/L (AF= 10 000)
sewage treatment plants (STP), 100 mg/L (AF= 10)
sediment (freshwater), 542 229.75 mg/kg dw
sediment (seawater), 54 222.98 mg/kg dw
soil, 259 870.48 mg/kg dw
oral (food), 20 mg/kg food (AF=300)

**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. > 0,4 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 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

Physical state	Liquid
Form	Liquid
Color	green-yellow
Odor	characteristic
Odor threshold	Not applicable
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]	194
Flammability	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	No information available.
Density [g/cm <sup>3</sup> ]	0,84 (15 °C / 59,0 °F)
Relative density	No information available.
Bulk density [kg/m <sup>3</sup> ]	Not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	26,1 mm <sup>2</sup> /s (DIN 51562)(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

None

## 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

No dangerous reactions known if used as directed.

### 10.4 Conditions to avoid

Strong heating.



**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 7 / 14

### **10.5 Incompatible materials**

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 toxicological effects**

**Acute oral toxicity**

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
LD50, oral, Rat, 5000 mg/kg bw
Alkyl thiophosphites
LD50, oral, Rat, > 2000 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, oral, Rat, 5000 mg/kg bw
4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat, CAS: 93882-40-7
LD50, oral, Rat, > 10 000 mg/kg bw

**Acute dermal toxicity**

Substance
Alkyl thiophosphites
LD50, dermal, Rabbit, > 500 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit, 2000 - 5000 mg/kg bw

**Acute inhalational toxicity**

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h

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

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

**Respiratory or skin sensitisation** Toxicological data of complete product are not available.  
May cause an allergic skin reaction.  
Calculation method

**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
Bis(nonylphenyl)amine, CAS: 36878-20-3
NOEL, oral, Rat, 100 mg/kg bw/day
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day
NOAEC, inhalative, Rat, 980 mg/m³ air
LOAEL, oral, Rat, 125 mg/kg bw/day

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

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

**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.  
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.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
EC50, (48h), Invertebrates, 100 mg/L
EL50, (72h), Algae, 100 mg/L
NOELR, (21d), Invertebrates, 4.45 mg/L
NOELR, (33d), fish, 10 mg/L
Alkyl thiophosphites
EL50, (48h), Daphnia magna, 0,09 mg/l
EL50, (72h), Selenastrum capricornutum, 0,31 mg/l
LL50, (24h), Oncorhynchus mykiss, 2 mg/l
LL50, (21d), Daphnia magna, 0,22 mg/l
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOELR, (14d), fish, 1 g/L
LL50, (4d), Invertebrates, 10 g/L
LL50, (4d), fish, 100 mg/L
4,4'-Thiodiethylen hydrogen-2-octadecenylsuccinat, CAS: 93882-40-7
LC50, (96h), fish, > 100 mg/l (OECD 203)
EL50, (48h), Daphnia magna, 9,5 mg/l (OECD 202)
EL50, (72h), Algae, > 100 mg/l (OECD 201)
Phenol derivates
EC50, (48h), Daphnia magna, > 101 mg/L
NOEC, (21d), Daphnia magna, >= 1 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

No classification on the basis of the calculation procedure of the preparation directive.



**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 10 / 14

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

In according to RoHS!  
Disposal in an incineration plant in accordance with the regulations of the local authorities.  
For recycling, consult manufacturer.

**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

**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



**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 11 / 14

**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**



## 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

No information available.

- SARA, 311

No information available.

- SARA, 313

No information available.

- TSCA

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

- FDA

No information available.

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

Ingredients not listed as carcinogens.

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

Ingredients not listed as carcinogens.

##### 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

No information available.

##### 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

**Ferdinand Bilstein GmbH + Co. KG**

Date printed 26.03.2024, Revision 26.03.2024

Version 10.0. Supersedes version: 8.0

Page 14 / 14

**NFPA Ratings**



TOP, FLAMMABILITY: 1 - Slight Hazard  
LEFT, HEALTH: 2 - Moderate Hazard  
RIGHT, REACTIVITY: 1 - Slight Hazard  
BOTTOM, SPECIAL NOTICE:

**HMIS Ratings**

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X

2 - Moderate Hazard  
1 - Slight Hazard  
1 - Slight Hazard  
X - Personal protection rating to be supplied by user depending on use conditions

**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**

None