

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

**Engine Oil 5W-20 HC E-FO**  
**Article number: 108350, 108351, 108352**

**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**

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 58256 Ennepetal / GERMANY  
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**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 [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: C14-16-18 Alkyl phenol. EUH208 May produce an allergic reaction.

**2.3 Other hazards**

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

**Human health dangers** Frequent persistent contact with the skin can cause skin irritation.

**Environmental hazards** Does not contain any PBT or vPvB substances.

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

**SECTION 3: Composition / Information on ingredients****3.1 Substances**

not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
50 - < 100	Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)
	CAS: 64742-54-7, EINECS/ELINCS: 265-157-1, EU-INDEX: 649-467-00-8, Reg-No.: 01-2119484627-25-XXXX
	GHS/CLP: Asp. Tox. 1: H304
1 - < 5	Bis(nonylphenyl)amine
	CAS: 36878-20-3, EINECS/ELINCS: 253-249-4, Reg-No.: 01-2119488911-28-XXXX
	GHS/CLP: Aquatic Chronic 4: H413
1 - < 5	C14-16-18 Alkyl phenol
	CAS: 1190625-94-5, EINECS/ELINCS: 931-468-2, Reg-No.: 01-2119498288-19
	GHS/CLP: Skin Sens. 1: H317 - STOT RE 2: H373

**Comment on component parts** For full text of H-statements and R-phrases: see SECTION 16.  
All chemical substances in this material are included on or exempted from listing on the IECSC Inventory.  
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>	Consult a doctor immediately. Rinse out mouth and give plenty of water to drink. Do not induce vomiting.

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

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

### 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)  
Sulphur oxides (SOx).  
Nitrogen oxides (NOx).  
Hydrogen sulfide ((H2S).

### 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 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 with absorbent material (e.g. general-purpose binder).  
Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

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

### 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.  
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



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Date printed 23.04.2024, Revision 23.04.2024

Version 6.0. Supersedes version: 5.0

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**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
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
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
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, oral, Long-term - systemic effects, 740 µg/kg bw/day
C14-16-18 Alkyl phenol
Industrial, inhalative, Long-term - systemic effects, 1.17 mg/m <sup>3</sup> (AF= 75)
Industrial, dermal, Long-term - systemic effects, 0.3 mg/kg bw/d (AF= 300)

**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
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
oral (food), 9,33 mg/kg
C14-16-18 Alkyl phenol
freshwater, 0.1 mg/L (AF= 1000)
seawater, 0.01 mg/L (AF= 10 000)
sewage treatment plants (STP), 100 mg/L (AF= 10)
sediment (freshwater), 4 266.16 mg/kg dw
sediment (seawater), 426.62 mg/kg dw
soil, 852.58 mg/kg 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.
<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. > 0,11 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>	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
<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>	brown
<b>Odor</b>	characteristic
<b>Odour threshold</b>	No information available.
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	No information available.
<b>Boiling point or initial boiling point and boiling range [°C]</b>	No information available.
<b>Flash point [°C]</b>	226
<b>Flammability</b>	not applicable
<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/cm<sup>3</sup>]</b>	ca. 0.85 (DIN 51757) (15 °C / 59,0 °F)
<b>Relative density</b>	not determined
<b>Bulk density [kg/m<sup>3</sup>]</b>	not applicable
<b>Solubility in water</b>	virtually insoluble
<b>Solubility other solvents</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	No information available.
<b>Kinematic viscosity</b>	44,25 mm <sup>2</sup> /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>	No information available.
<b>Decomposition temperature [°C]</b>	No information available.
<b>Particle characteristics</b>	No information available.

## 9.2 Other information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See SECTION 10.3.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

### 10.4 Conditions to avoid

No special measures necessary.

### 10.5 Incompatible materials

Oxidizing agent

Acids

Strong basic compounds

### 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
Bis(nonylphenyl)amine, CAS: 36878-20-3
LD50, oral, Rat, 5000 mg/kg bw
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, oral, Rat, 5000 mg/kg bw
C14-16-18 Alkyl phenol
LD50, oral, Rat, > 2000 mg/kg bw

**Acute dermal toxicity**

Product
dermal, Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, dermal, Rabbit, 2000 - 5 00 mg/kg bw
C14-16-18 Alkyl phenol
LD50, dermal, Rat, > 2000 mg/kg bw

**Acute inhalational toxicity**

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h

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

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

**Respiratory or skin sensitisation** Non-sensitizing.  
 On basis of test data

**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
Bis(nonylphenyl)amine, CAS: 36878-20-3
NOEL, oral, Rat, 100 mg/kg bw/day
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day
NOAEL, dermal, Rabbit, 1000 mg/kg bw/day
NOAEC, inhalative, Rat, 980 mg/m³ air
LOAEL, oral, Rat, 125 mg/kg bw/day

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

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

**- Fertility**

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed

**- Development**

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed

**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**

**11.2.1 Endocrine disrupting properties** No information available.

**11.2.2 Other information** none

**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
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
EL50, (48h), Invertebrates, 10 g/L
NOELR, (14d), fish, 1 mg/L
LL50, (96h), Invertebrates, 10 g/L
LL50, (96h), fish, 100 mg/L
C14-16-18 Alkyl phenol
LC50, (96h), Cyprinus carpio, 100 mg/L
EC50, (48h), Daphnia magna, 100 mg/L
EC50, (72h), Pseudokirchneriella subcapitata, 100 mg/L

**12.2 Persistence and degradability**

**Behaviour in environment compartments** not determined

**Behaviour in sewage plant** Can be separated out mechanically in purification plants.

**Biological degradability** The product is not readily biodegradable.



### 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

No information available.

### 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.

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

Coordinate disposal with the authorities if necessary.

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

In according to RoHS!

#### 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



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Date printed 23.04.2024, Revision 23.04.2024

Version 6.0. Supersedes version: 5.0

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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"

**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

<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/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (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 I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances $\geq$ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains $\geq$ 0.1% of substances with the following restrictions. 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is not subject to any restrictions.
<b>TRANSPORT-REGULATIONS</b>	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)
<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

### 15.2 Chemical safety assessment

not applicable

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H373 May cause damage to organs through prolonged or repeated exposure.  
H317 May cause an allergic skin reaction.  
H413 May cause long lasting harmful effects to aquatic life.  
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** none