

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

1.1 Product identifier

febi 108350 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

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
 E-mail info@febi.com

Address enquiries to

Technical information info@febi.com

Safety Data Sheet 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 (EC) No 1272/2008]

No classification.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (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

Product-type:

3.2 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	C14-16-18 Alkyl phenol EINECS/ELINCS: 931-468-2 GHS/CLP: Skin Sens. 1: H317 - STOT RE 2: H373
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

Comment on component parts

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 and R-phrases: see SECTION 16.

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 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	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 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_x).
Nitrogen oxides (NO_x).
Hydrogen sulfide ((H₂S).



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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



SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
Industrial, dermal, Long-term - systemic effects: 5 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 0,25 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 2,5 mg/kg bw/day.
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
Industrial, dermal, Long-term - systemic effects: 1 mg/kg bw/day.
Industrial, inhalative, Long-term - local effects: 5,6 mg/m³.
Industrial, inhalative, Long-term - systemic effects: 2,7 mg/m³.
general population, oral, Long-term - systemic effects: 0,74 mg/kg bw/day.

PNEC

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
soil, 263000 mg/kg.
sediment (seawater), 13200 mg/kg.
sediment (freshwater), 132000 mg/kg.
sewage treatment plants (STP), 1 mg/l.
seawater, 0,01 mg/l.
freshwater, 0,1 mg/l.
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
oral (food), 9,33 mg/kg.

8.2 Exposure controls

Additional advice on system design	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.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	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).
Skin protection	Light protective clothing.
Other	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.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form	liquid
Color	amber colour
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	No information available.
Boiling point [°C]	No information available.
Flash point [°C]	232
Flammability (solid, gas) [°C]	not applicable
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/ml]	ca. 0.85 (DIN 51757) (15 °C / 59,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	42.2 mm ² /s (40°C)
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	No information available.
Decomposition temperature [°C]	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.

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SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.:
dermal, Based on the available information, the classification criteria are not fulfilled.:
oral, Based on the available information, the classification criteria are not fulfilled.:
Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
LD50, dermal, Rat: >2000 mg/kg (OECD 402).
LD50, oral, Rat: >5000 mg/kg (OECD 401).
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, dermal, Rabbit: > 2000 mg/kg.
LD50, oral, Rat: > 5000 mg/kg.
LC50, dermal, Rat: 2,18 mg/l.

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	EC: 931-468-2 Non-sensitizing.
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.
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.
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.

SECTION 12: Ecological information**12.1 Toxicity**

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
EC50, (48h), Daphnia magna: >100 mg/l (OECD 202).
LC0, (96h), Brachidanio rerio: 58 mg/l (OECD 203).
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
EL50, (24h), Daphnia magna: > 10000 mg/l.
NOELR, (14d), Oncorhynchus mykiss: >= 1000 mg/l.
LL50, (96h), Pimephales promelas: >100 mg/l.
NOEL, (72h), Pseudokirchneriella subcapitata: >= 100 mg/l.
NOEL, (21d), Daphnia magna: 10 mg/l.

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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 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 c 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*

SECTION 14: Transport information**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



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

not applicable

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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- 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 applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information**16.1 Hazard statements (SECTION 03)**

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

ELINCS = European List of Notified Chemical Substances

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

LC50 = Lethal concentration, 50%

LD50 = Median lethal dose

LC0 = lethal concentration, 0%

LOAEL = lowest-observed-adverse-effect level

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



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Modified position

SECTION 3 been added: C14-16-18 Alkyl phenol

SECTION 2 been added: EUH208 May produce an allergic reaction.