

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

### 1.1 Product identifier

**Engine Oil SAE 5W-30 HC C2**  
**Article number: 173443, 173444, 173445**

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

#### 1.2.1 Relevant uses

Engine 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

No classification.

### 2.2 Label elements

The product does not require a hazard in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2024)

**Hazard pictograms** None

**Signal word** None

**Hazard statements** None

**Precautionary statements** None

### 2.3 Other hazards

**Human health dangers** If swallowed or in the event of vomiting, risk of product entering the lungs.  
Frequent persistent contact with the skin can cause skin irritation.

**Environmental hazards** Contains no ingredients with endocrine-disrupting properties.  
Contains no ingredients with endocrine-disrupting properties ( $\geq 0,1\%$ ).

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

This product is classified as non-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
30 - <60	Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract) CAS: 64742-54-7
15 - <30	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based CAS: 72623-87-1
5 - <15	Hydrocarbon Oil Liquid
1 - <2,5	Calcium branched alkyl phenate sulphide (overbased) CAS: -

#### 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.

## 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	Fire extinguishing method of surrounding areas must be considered. 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 (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.  
Ensure adequate ventilation.  
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

### 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.  
Fire class (DIN EN 2): B  
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 (US)

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)
CAS: 64742-54-7
Long-term exposure: 5 mg/m <sup>3</sup> , OSHA, oil mist
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
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
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, oral, Long-term - systemic effects, 0.74mg/kg bw/day

#### PNEC

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
oral (food), 9,33 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
oral (food), 9.33 mg/kg food

### 8.2 Exposure controls

#### Additional advice on system design

Ensure adequate ventilation on workstation.  
General limit for oil mist should be noted.  
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

Protective clothing (EN 340)

#### 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-P2.

#### Thermal hazards

No information available.

#### Delimitation and monitoring of the environmental exposition

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	light brown
Odor	characteristic
Odor threshold	No information available.
pH-value	Not applicable
pH-value [1%]	No information available.
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	>200 (ISO 2592)
Flammability	not flammable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	<0,01 (20°C)
Density [g/cm³]	ca. 0,853 (DIN 51757) (15 °C / 59,0 °F)
Relative density	Not determined
Bulk density [kg/m³]	Not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	ca. 10,2 mm²/s (100°C) (DIN 51562/T1) >20,5 mm²/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

Pour point: ca. -30°C

## 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

strong acids  
Strong heating, because the thermal decomposition starts from >100°C.

### 10.5 Incompatible materials

Oxidizing agent  
Acids  
Strong basic compounds

## **10.6 Hazardous decomposition products**

In the case of heating following (decomposition) products may occur:  
Hydrogen sulfide ( $\text{H}_2\text{S}$ ).



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute oral toxicity** Based on available data, the classification criteria are not met.

Product
ATE-mix, oral, >2000 mg/kg bw
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, oral, Rat, > 5000 mg/kg bw
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, oral, Rat, > 5000 mg/kg bw
Hydrocarbon Oil Liquid
LD50, oral, Rat, > 5000 mg/kg

**Acute dermal toxicity** Based on available data, the classification criteria are not met.

Product
ATE-mix, dermal, >2000 mg/kg bw
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, dermal, Rabbit, > 5000 mg/kg bw
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit, > 5000 mg/kg bw
Hydrocarbon Oil Liquid
LD50, dermal, Rabbit, > 5000 mg/kg

**Acute inhalational toxicity** Based on available data, the classification criteria are not met.

Product
ATE-mix, inhalativ (vapor ), >20 mg/L
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
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LC50, inhalative, Rat, > 5 mg/L, 4h
Hydrocarbon Oil Liquid
LC50, inhalativ (mist), Rat, > 5 mg/l (4h)

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

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Eye, non-irritating

**Skin corrosion/irritation** Repeated exposure may cause skin dryness or cracking.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
dermal, non-irritating

**Respiratory or skin sensitisation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
dermal, non-sensitizing

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**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
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/m <sup>3</sup> air
LOAEL, oral, Rat, 125 mg/kg bw/day
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> air
LOAEL, oral, Rat, 125 mg/kg bw/day

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

Substance
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
in vitro, negativ

**Reproduction toxicity** Based on the information available, the classification criteria have not been 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
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEL, oral, Rat, 1000 mg/kg bw/day

**- Development** No information available.

**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**

Ecological data of complete product are not available.

Based on available data, the classification criteria are not met.

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
EC50, (48h), > 10000 mg/l (Gammarus pulex), OECD 202
EC50, (72h), Algae, > 100 mg/l
NOEC, (72h), Pseudokirchneriella subcapitata, ≥ 100 mg/l, OECD 201
NOEC, (21d), Daphnia magna, 10 mg/l, OECD 211
LL50, (96h), Fish, > 100 mg/l, OECD 203
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
EL50, (48h), Invertebrates, > 10000 mg/L
LL50, (4d), Fish, > 100 mg/L
Hydrocarbon Oil Liquid
LC50, Fish, >100 mg/L
EC50, Daphnia magna, >10000 mg/L
EC50, (72h), Algae, >100 mg/L



12.2 Persistence and degradability

No information available.

Behaviour in environment  
compartments

Behaviour in sewage plant

Biological degradability                      The product is not readily biodegradable.

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
(28d), 31 %, OECD 301 F, The product is not readily biodegradable.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
(28d), 1 - 4 %, OECD 301 B, The product is not readily biodegradable.
Hydrocarbon Oil Liquid
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

Contains no ingredients with endocrine-disrupting properties (≥ 0,1%).

12.7 Other adverse effects

None known.

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.  
In according to RoHS!

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

### 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



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**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**

<b>National regulations</b>	29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65
- SARA, 302	Not applicable
- SARA, 311	Not applicable
- SARA, 313	Not applicable
- CA Proposition 65	No chemical substances in this material are named on the California P65 list.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA	No information available.
<b>American Conference of Governmental Industrial Hygienists - ACGIH</b>	No information available.
<b>International Agency for Research on Cancer IARC</b>	No information available.
<b>National Toxicology Program - NTP</b>	No information available.
<b>HAP-VOC</b>	Not applicable
<b>Transport-regulations</b>	DOT-Classification, ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)

**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: 0 - Minimal Hazard  
LEFT, HEALTH: 1 - Slight Hazard  
RIGHT, REACTIVITY: 0 - Minimal Hazard  
BOTTOM, SPECIAL NOTICE: -

HMIS Ratings

HEALTH	1	1 - Slight Hazard
FLAMMABILITY	1	1 - Slight Hazard
PHYSICAL HAZARD	0	0 - Minimal Hazard
PERSONAL PROTECTION	X	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

1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 8.1, 9.1, 11.1, 11.2, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 15.1, 16.2, 16.3