

Ferdinand Bilstein GmbH + Co. KG

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

febi 33889 automatic transmission fluid (ATF)
Article number: 33889, 100706, 100707, 108991

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
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 58256 Ennepetal / GERMANY
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 Homepage www.febi.com
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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)**Company** +49 2333 911-0**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]**

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

2.2 Label elements**Hazard pictograms**

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

Signal word

DANGER

Contains:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Hazard statements

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.
 P331 Do NOT induce vomiting.
 P405 Store locked up.
 P501 Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards**Human health dangers**

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

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

No particular hazards known.

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SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
50 - 100	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based CAS: 72623-87-1, EINECS/ELINCS: 276-738-4, EU-INDEX: 649-483-00-5, Reg-No.: 01-2119474889-13-XXXX GHS/CLP: Asp. Tox. 1: H304
0,1 - < 0,25	2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol CAS: 1218787-32-6, EINECS/ELINCS: 620-540-6, Reg-No.: 01-2119510877-33-XXXX GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1C: H314 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M_acute = 10
0,01 - < 0,1	N,N-Dimethyl-n-octadecylamine CAS: 124-28-7, EINECS/ELINCS: 204-694-8, Reg-No.: 01-2119486676-20 GHS/CLP: Skin Corr. 1B: H314 - Acute Tox. 4: H302 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410
0,01 - < 0,1	3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine EINECS/ELINCS: 939-485-7, Reg-No.: 01-2119974116-35 GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410

Comment on component parts

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

General information

Change soaked clothing.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact

When in contact with the skin, clean 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

Do not induce vomiting.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache
Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.
If swallowed or in the event of vomiting, risk of product entering the lungs.

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)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.

Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.

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

Some risk of slipping due to 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.

Do not discharge into the subsoil/soil.

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).

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.

Use only in well-ventilated areas.

Keep away from sources of ignition - refrain from smoking.

Ignitable mixtures can be formed in the empty container.

Do not eat, drink or smoke when using this product.

After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

Use barrier skin cream.

Cloths contaminated with product should not be kept in trouser pockets.

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 tightly closed container.

Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container in a well-ventilated place.

Protect from heat/overheating and from sun.

7.3 Specific end use(s)

See product use, SECTION 1.2

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
Industrial, inhalative, Acute - local effects: 1 mg/m ³ .
Industrial, inhalative, Long-term - local effects: 1 mg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 1 mg/m ³ .
general population, oral, Long-term - systemic effects: 0.5 mg/kg bw/d (AF=100).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Industrial, dermal, Long-term - systemic effects: 1 mg/kg bw/day 5.6 mg/m ³ .
Industrial, inhalative, Long-term - local effects: 5.6 mg/m ³ 5.6 mg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 2.7 mg/m ³ .
general population, oral, Long-term - systemic effects: 0.74 mg/kg bw/day 5.6 mg/m ³ .
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
Industrial, inhalative, Long-term - systemic effects: 2.112 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 0.3 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 0.214 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 0.214 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 0.745 mg/m ³ .
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
Industrial, inhalative, Long-term - systemic effects: 4.9 mg/m ³ (AF= 25).
Industrial, dermal, Long-term - systemic effects: 0.7 mg/kg bw/d (AF= 100).
general population, inhalative, Long-term - systemic effects: 0.74 mg/m ³ (AF= 50).

PNEC

Substance
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
sewage treatment plants (STP), 130 µg/L (AF= 100).
seawater, 0.03 µg/L (AF= 100).
sediment (freshwater), 1.25 mg/kg dw (AF=50).
sediment (seawater), 0.125 mg/kg dw (AF=500).
soil, 1 mg/kg dw (AF=10).
freshwater, 0.26 µg/L (AF= 10).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
oral (food), 9,33 mg/kg.
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
oral (food), 2 mg/kg food.
soil, 5 mg/kg soil dw.
sediment (seawater), 0.169 mg/kg sediment dw.
sediment (freshwater), 1.692 mg/kg sediment dw.
sewage treatment plants (STP), 1500 µg/L.
seawater, 0.021 µg/L.

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freshwater, 0.214 µg/L.
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
freshwater, 0.84 µg/L (AF= 50).
seawater, 0.084 µg/L (AF= 500).
sewage treatment plants (STP), 1.3 mg/L (AF= 10).
sediment (freshwater), 3.19 mg/kg dw (AF= 1).
soil, 1.59 mg/kg dw (AF= 1).
sediment (seawater), 0.32 mg/kg dw (AF= 10).

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. > 0,4 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. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin.
Respiratory protection	No special measures necessary.
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	blue
Odor	characteristic
Odour threshold	No information available.
pH-value	No information available.
pH-value [1%]	No information available.
Boiling point [°C]	not applicable
Flash point [°C]	190 (EN ISO 2592) (COC)
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	0,84 15°C (DIN 51757)
Bulk density [kg/m ³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	18 mm ² /s 40°C (DIN 51562)
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	No information available.

9.2 Other information

No information available.

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 and strong oxidizing agents.

10.4 Conditions to avoid

Strong heating.

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
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
LD50, oral, Rat: >2000 mg/kg bw (OECD 401).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit: >= 2000 mg/kg (OECD 402).
LD50, oral, Rat: >= 5000 mg/kg (OECD 401).
LC50, inhalative, Rat: >= 5,53 mg/l (OECD 403).
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
LD50, oral, Rat: 1500 mg/kg bw (OECD 425).
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
LD50, oral, Rat: 300 - 2000 mg/kg bw.

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	Based on the available information, the classification criteria are not fulfilled.
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 fulfilled. May be fatal if swallowed and enters airways. On basis of test data

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.

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SECTION 12: Ecological information**12.1 Toxicity**

Product
Based on the available information, the classification criteria are not fulfilled.:
Substance
N,N-Dimethyl-n-octadecylamine, CAS: 124-28-7
LC50, (96h), Oncorhynchus mykiss: 0,18 mg/l (OECD 203).
EC10, (72h), Desmodemus subspicatus: 4,31 µg/l (OECD 201).
EC10, (48h), Daphnia magna: 0,593 mg/l (OECD 202).
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
EL50, (24h), Daphnia magna: >10000 mg/l (OECD).
LL50, (96h), Pimephales promelas: >100 mg/l (OECD).
NOEL, (72h), Pseudokirchneriella subcapitata: >100 mg/l (OECD).
NOEL, (21d), Daphnia magna: 10 mg/l (OECD).
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6
LC50, (24h), Danio rerio: >0.29 mg/L (OECD 203).
EC50, (24h), Daphnia magna: 0.21 mg/L (OECD 202).
EC10, (72h), Daphnia magna: 34.1 µg/L (OECD 201).
EC10, (21d), Daphnia magna: 10.7 µg/L (OECD 211).
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine
LC50, (96h), fish: 2.14 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 Other adverse effects

No classification on the basis of the calculation procedure of the preparation directive.
 Ecological data of complete product are not available.
 Do not discharge product unmonitored into the environment or into the drainage.

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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

In according to RoHS!
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 130208*

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*
150102
150104

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

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



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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

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)

H410 Very toxic to aquatic life with long lasting effects.
 H400 Very toxic to aquatic life.
 H314 Causes severe skin burns and eye damage.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.

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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**

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (On basis of test data)

Modified position

SECTION 3 been added: N,N-Dimethyl-n-octadecylamine

SECTION 3 been added: 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine

SECTION 3 been added: 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol

SECTION 2 deleted: EUH208 May produce an allergic reaction.