ebi bilstein

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3EC	TION 1: Identification of the su	bstance/mixture and of the company/undertaking
1.1	Product identifier	
		febi 101171 High-performance oil for Haldex coupling Article number: 101171
1.2	Relevant identified uses of the	e substance or mixture and uses advised against
1.2.1	Relevant uses	
		Lubricant
1.2.2	2 Uses advised against	
		None known.
1.3	Details of the supplier of the s	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)
SEC	TION 2: Hazards identification	
2.1	Classification of the substanc	e or mixture [REGULATION (EC) No 1272/2008]
		Eye Irrit. 2: H319 Causes serious eye irritation.
2.2	Label elements	
	Hazard pictograms	The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP)
	Signal word	WARNING
	Hazard statements	H319 Causes serious eye irritation.
	Precautionary statements	 P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P280 Wear eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice / attention. 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.
	Special labelling	Contains: Calciumsulfonate, petroleum. EUH208 May produce an allergic reaction.
2.3	Other hazards	
	Environmental hazards	Does not contain any PBT or vPvB substances.

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Date printed 05.11.2019, Revision 05.11.2019

Version 03. Supersedes version: 02 Page 2 / 11

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance	
50 - < 100	< 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	
1 - < 2,5	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	
	CAS: 85940-28-9, EINECS/ELINCS: 288-917-4	
	GHS/CLP: Eye Dam. 1: H318 - Skin Irrit. 2: H315 - Aquatic Chronic 2: H411	
0,1 - < 1	Calciumsulfonate, petroleum	
	CAS: 61789-86-4, EINECS/ELINCS: 263-093-9	
	GHS/CLP: Skin Sens. 1B: H317	

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	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	Do not induce vomiting. Consult a doctor immediately. Rinse out mouth and give plenty of water to drink.
4.2	Most important symptoms and ef	fects, both acute and delayed
		No information available.
4.3	Indication of any immediate medi	cal attention and special treatment needed
		Treat symptomatically. Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	Foam, dry powder, water spray jet, carbon dioxide.
Extinguishing media that must not be used	Full water jet.
Special hazards arising from the	substance or mixture
	Risk of formation of toxic pyrolysis products.
	Nitrogen oxides (NOx).
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 within the local regulations. Cool containers at risk with water spray jet.
	Suitable extinguishing media Extinguishing media that must not be used Special hazards arising from the

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Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 3 / 11

SEC	SECTION 6: Accidental release measures		
6.1	······································		
		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.	
6.3	Methods and material for contain	nment and cleaning up	
		Take up with absorbent material (e.g. oil binder). Dispose of absorbed material in accordance within the regulations.	
6.4	Reference to other sections		
		See SECTION 8+13	
SEC	TION 7: Handling and storage		
7.1	Precautions for safe handling		
		No special measures necessary if used correctly. Use only in well-ventilated areas. Use solvent-resistant equipment.	
		The product is combustible.	
		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.	
		Contaminated work clothing should not be allowed out of the workplace.	
		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, incl	uding any incompatibilities	
		Keep only in original container. Prevent penetration into the ground.	
		Do not store together with oxidizing agents.	
		Keep container in a well-ventilated place. Keep container tightly closed.	
7.3	Specific end use(s)		

See product use, SECTION 1.2

Ferdinand Bilstein GmbH + Co. KG

Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 4 / 11

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

	Substance
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
	Industrial, inhalative, Long-term - local effects: 5.6 mg/m ³ 5.6 mg/m ³ .
	Industrial, dermal, Long-term - systemic effects: 1 mg/kg bw/day 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/m³.
	Calciumsulfonate, petroleum, CAS: 61789-86-4
	Industrial, dermal, Long-term - systemic effects: 3,33 mg/kg bw/d.
	Industrial, inhalative, Long-term - systemic effects: 11,75 mg/m ³ .
	general population, inhalative, Long-term - systemic effects: 2,9 mg/m ³ .
	general population, oral, Long-term - systemic effects: 0,8333 mg/kg bw/d.
	general population, dermal, Long-term - systemic effects: 1,667 mg/kg bw/d.
PNEC	
	Substance
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
	oral (food), 9,33 mg/kg.
	Calciumsulfonate, petroleum, CAS: 61789-86-4
	oral (food), 16 667 mg/kg food.
	soil, 271 000 000 mg/kg dw.
	sediment (seawater), 226 000 000 mg/kg dw.
	sediment (freshwater), 226 000 000 mg/kg dw.
	sewage treatment plants (STP), 1000 mg/l (AF=10).
	seawater, 1 mg/l (AF=10000).
	freshwater, 1 mg/l (AF=1000).

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Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 5 / 11

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. General exposure limit for oil mist should be noted.
	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, >120 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	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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	light brown
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	208 °C/ 406°F
Flammability (solid, gas) [°C]	Not explosive.
Lower explosion limit	not self-igniting
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	0,85 (DIN 51757) (15 °C / 59,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	29,94 mm²/s 40°C [104°F] (DIN 51562)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined

9.2 Other information

No information available.

Ferdinand Bilstein GmbH + Co. KG

Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 6 / 11

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. Reactions with strong alkalies. Reactions with strong acids.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agent. See SECTION 10.3.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

Ferdinand Bilstein GmbH + Co. KG

Date printed 05.11.2019, Revision 05.11.2019

Version 03. Supersedes version: 02 Page 7 / 11

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	
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).	
Calciumsulfonate, petroleum, CAS: 61789-86-4	
dermal, > 10% Skin. Sen. 1B - H317.	
LD50, oral, > 5000 mg/kg bw.	

Serious eye damage/irritation	Toxicological data of complete product are not available. Irritant Calculation method
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	Toxicological data of complete product are not available. No classification. CAS 61789-86-4: > 10% Skin Sens. 1B/ Classification was carried out based on substance- specific concentration limits. May produce an allergic reaction.
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

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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Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 8 / 11

SECTION 12: Ecological information

Product

12.1 Toxicity

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

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LC50, (96h), fish: 5 mg/l.
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).
Calciumsulfonate, petroleum, CAS: 61789-86-4
LL50, (96h), fish: > 10 000 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

Ecological data of complete product are not available. Do not discharge product unmonitored into the environment or into the drainage.

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

Ferdinand Bilstein GmbH + Co. KG

Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 9 / 11

SECTION 14: Transport information	
14.1 UN number	
Transport by land according to	not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with not applicable IMDG

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

ADR/RID

Transport by land according to	NO DANGEROUS GOODS
ADR/RID	

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with NOT CLASSIFIED AS "DANGEROUS GOODS" IMDG

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to not applicable ADR/RID

Inland navigation (ADN) not applicable

Marine transport in accordance with not applicable IMDG

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to not applicable ADR/RID

Inland navigation (ADN) not applicable

Marine transport in accordance with not applicable IMDG

Air transport in accordance with IATA not applicable

Ferdinand Bilstein GmbH + Co. KG

Date printed 05.11.2019, Revision 05.11.2019



Version 03. Supersedes version: 02 Page 10 / 11

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		
		Chemical safety assessments for substances in this mixture were not carried out.	
SECTION 16: Other information			
16.1	Hazard statements (SECTION 03)		

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H304 May be fatal if swallowed and enters airways.

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Date printed 05.11.2019, Revision 05.11.2019

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 Ey

Modified position

Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)

none