

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.03.2023, Revision 06.03.2023

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

1.1 Product identifier

Engine Oil 15W - 40 Article number: 32925, 32926, 32927, 32928, 32929, 32930, 80366 UFI: WS5X-Q2EH-A003-AFJ1

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

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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]

Skin Sens. 1: H317 May cause an allergic skin reaction.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word	WARNING
Contains:	Alkyl (C18-C28) toluenesulfonic acid, calcium salts, borated
Hazard statements	H317 May cause an allergic skin reaction.
Precautionary statements	 P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P280 Wear protective gloves. P333+P313 If skin irritation or rash occurs: Get medical advice / attention. P501 Dispose of contents/container to approved disposal company or municipal collection point.

2.3 Other hazards

Environmental hazards	Does not contain any PBT or vPvB substances. Contains no ingredients with endocrine-disrupting properties.
Other hazards	none



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SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance	
1 - < 2.5	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	
	CAS: 68784-31-6, EINECS/ELINCS: 272-238-5, Reg-No.: 01-2119657973-23-XXXX	
GHS/CLP: Eye Dam. 1: H318 - Aquatic Chronic 2: H411		
1 - < 2.5	Alkyl (C18-C28) toluenesulfonic acid, calcium salts, borated	
	CAS: -, EINECS/ELINCS: 953-650-0	
	GHS/CLP: Skin Sens. 1B: H317 - Repr. 2: H361d	
	SCL [%]: 17.15 - 100: Repr. 2: H361	

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	Take off contaminated clothing and wash before reuse.
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. Do not induce vomiting. Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

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		
	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 (SOx). Nitrogen oxides (NOx).



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5.3	Advice for firefighters	
		Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus.
		Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
SEC	TION 6: Accidental release measur	res
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 contain	ment and cleaning up
		Take up with absorbent material (e.g. general-purpose 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	
		Avoid formation of aerosols.
		Do not smoke. Fire class (DIN EN 2): B
		Do not eat, drink or smoke when using this product. Use barrier skin cream. Wash hands before breaks and after work. 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, inclu	iding any incompatibilities
		Keep only in original container. Prevent penetration into the ground.
		Do not store together with oxidizing agents.
		Keep container tightly closed. Protect from heat/overheating.
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 relevant

DNEL

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylb	utvl) esters zinc salts CAS 68784-31-6
Industrial, dermal, Acute - systemic effects, 100 mg/kg bw/d	
Industrial, dermal, Long-term - systemic effects, 10.42 mg/kg bw/	/d
Industrial, inhalative, Acute - systemic effects, 496.4 mg/m ³	
Industrial, inhalative, Long-term - systemic effects, 2.93 mg/m ³	
general population, oral, Acute - systemic effects, 29 mg/kg bw/d	
general population, oral, Long-term - systemic effects, 0.21 mg/k	g bw/d
general population, dermal, Acute - systemic effects, 50 mg/kg b	w/d
general population, dermal, Long-term - systemic effects, 2.1 mg	/kg bw/d
general population, inhalative, Acute - systemic effects, 198.6 mg	g/m³
general population, inhalative, Acute - systemic effects, 11.75 mg	y/m³
Alkyl (C18-C28) toluenesulfonic acid, calcium salts, borated, CAS	3: -
There are no DNEL values established for the substance.	

PNEC

Substance	
Phosphorodithio	c acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6
oral (food), 8.33	ng/kg
soil, 0.0548 mg/	9
sewage treatme	t plants (STP), 3.8 mg/l
sediment (freshv	ater), 0.0701 mg/l
sediment (seawa	ter), 0.00701 mg/l
freshwater, 0.00	0 mg/l
seawater, 0.004	mg/l
Alkyl (C18-C28)	oluenesulfonic acid, calcium salts, borated, CAS: -
There are no PN	EC values established for the substance.



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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	If there is a risk of splashing: safety glasses
	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. 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	none
	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

Information on basic physical and chemical properties 9.1

Physical state	liquid
Form	liquid
Color	brown
Odor	characteristic
Odour threshold	not relevant
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	> 235 (ISO 2592)
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	< 0.01 (20°C)
Density [g/cm³]	0.878 (DIN 51757) (15 °C / 59,0 °F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	> 20.5 mm²/s (40° C) ca. 14.6 mm²/s (100°C) (DIN 51562/T1)
Relative vapour density	No information available.
Evaporation speed	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.



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9.2 Other information

Pour point: - 30°C

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, alkalies and oxidizing agents.

10.4 Conditions to avoid

Strong heating, because the thermal decomposition starts from > 65°C.

10.5 Incompatible materials

Oxidizing agent Acids

10.6 Hazardous decomposition products

In the case of heating following (decomposition) products may occure: > $65^\circ C$ / Hydrogen sulfide (H2S).



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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

 Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6

 LD50, oral, Rat, 2900 - 3400 mg/kg bw

Acute dermal toxicity

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

Substance

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6 LD50, dermal, Rabbit, 5000 mg/kg bw

Acute inhalational toxicity

	Product	
inhalative, Based		on the available information, the classification criteria are not fulfilled.
Serious eye damage/irritation		Non-irritant. On basis of test data
Skin corrosion/irr	itation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or ski	n sensitisation	Toxicological data of complete product are not available. May cause an allergic skin reaction. Calculation method
Specific target or single exposure	gan toxicity —	Based on the available information, the classification criteria are not fulfilled.
Specific target or repeated exposur		Based on the available information, the classification criteria are not fulfilled.
	Substance	
	Phosphorodithioic	acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6
NOAEL, oral, Rat, 125 mg/kg bw/day		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.
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.
2 Information on other hazards	

11.2 Information on other hazards Endocrine disrupting properties Other information

Contains no ingredients with endocrine-disrupting properties.



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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(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	s, CAS: 68784-31-6
C50, (4d), fish, 46 mg/L	
C50, (21d), Invertebrates, 530 - 800 μg/L	
L50, (72h), Algae, 240 - 410 mg/L	
L50, (48h), Invertebrates, 75 mg/L	
IOEC, (21d), Invertebrates, 400 - 800 µg/L	
IOELR, (48h), Invertebrates, 32 mg/L	
IOELR, (4d), fish, 3.2 mg/L	
L50, (4d), fish, 4.4 mg/L	
OEC, (21d), Invertebrates, 800 μg/L	

12.2 Persistence and degradability

Behaviour in environment compartments	
Behaviour in sewage plant	Can be separated out mechanically in purification plants.
Biological degradability	Biodegradable in part only

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.

12.7 Other adverse effects

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



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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	
		In according to RoHS! Coordinate disposal with the disposal contractor/authorities if necessary. Disposal in an incineration plant in accordance with the regulations of the local authorities.
	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
SEC	TION 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
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 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		
	EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014	
	TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)	
	NATIONAL REGULATIONS (GB):	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)	0 %	
15.2 Chemical safety assessment			
		For this product a chemical safety assessment has not been carried out.	
SECTION 16: Other information			

16.1 Hazard statements (SECTION 3)

H411 Toxic to aquatic life with long lasting effects.

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

H317 May cause an allergic skin reaction.



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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 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 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

16.3 Other information

Classification procedure Modified position

SECTION 11 been added: Contains no ingredients with endocrine-disrupting properties. SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.