Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 1 / 8

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1	1 Product identifier		
		febi 22503 hydraulic accumulator Article number: 22503	
1.2	Relevant identified uses of the su	ibstance or mixture and uses advised against	
1.2.1	Relevant uses		
		Hydraulic accumulators	
1.2.2	2 Uses advised against		
		None known.	
1.3	.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)	
SEC	SECTION 2: Hazards identification		
2.1	2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]		
		Press. Gas (Compressed gas): H280 Contains gas under pressure; may explode if heated.	
2.2	Label elements	This product is an article and therefore it does not require labelling according to EC directives [REACH/CLP].	
2.3	Other hazards		
		none The contained dangerous materials are not freely available with foreseeable use.	
	Physico-chemical hazards	This accumulator is a cylinder containing nitrogen, a colorless inert gas under pressure. Do not rupture, open or disassemble this accumulator. Do not expose the accumulator to direct flame or heat.	
	Environmental hazards	Does not contain any PBT or vPvB substances.	
	Other hazards	Further hazards were not determined with the current level of knowledge.	

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 2 / 8

SECTION 3: Composition / Information on ingredients

Product-type:

The product is an article.

		1	
	Range [%] Substance		
	79 Nitrogen		
	GHS/CLP: Press. (INECS/ELINCS: 231-783-9
			Jas (Compressed gas): H280
	Comment on com	ponent parts	The concentrations of the ingredients are valid for containig gases. They are not for the complete system. The contained dangerous materials are not freely available with foreseeable use. Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%. For full text of H-statements: see SECTION 16.
SEC	TION 4: First aid	measures	
	.1 Description of first aid measures		
4.1	General information		 none The contained dangerous materials are not freely available with foreseeable use.
	Inhalation		Not required under normal conditions.
	Skin contact		Not required under normal conditions.
	Eye contact		Not required under normal conditions.
	Ingestion		Not required under normal conditions.
4.0			for the bath south and delayed
4.2	Most Important	symptoms and e	ffects, both acute and delayed
			None known.
4.3	Indication of any	y immediate med	lical attention and special treatment needed
			Treat symptomatically.
SEC	TION 5: Fire-fight	ing measures	
E 4	Extinguishing m	adia	
5.1	Extinguishing m Suitable extinguis		Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.
	Extinguishing mee	dia that must not	none
5.2			
J.Z	Special flazarus	ansing nom me	Bursting Containers can be forcibly projected from a fire.
			buisting containers can be forebly projected norma inc.
5.3	Advice for firefig	ghters	
			Not required under normal conditions.
			Cool containers at risk with water spray jet.
SEC	TION 6: Accident	al release measu	
			ires
SEC 6.1			
		itions, protective	equipment and emergency procedures
6.1	Personal precau	itions, protective	equipment and emergency procedures
6.1	Personal precau Environmental p	itions, protective	e equipment and emergency procedures Not required under normal conditions.
6.1 6.2	Personal precau Environmental p	itions, protective	e equipment and emergency procedures Not required under normal conditions.
6.1 6.2	Personal precau Environmental p	itions, protective	equipment and emergency procedures Not required under normal conditions. Do not discharge into the drains/surface waters/groundwater. mment and cleaning up

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01 F

Page 3 / 8

6.4	Reference to other sections	
		See SECTION 8+13
SEC	TION 7: Handling and storage	
7.1	Precautions for safe handling	
		No dangerous reactions known if used as directed.
		Wash hands before breaks and after work.
7.2 Conditions for safe storage, including any incompatibilities		uding any incompatibilities
		Keep away from acids Do not store together with oxidizing agents.
		Keep in a cool place. Protect from heat/overheating and from sun.
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

8.2 Exposure controls

Additional advice on system design	No special measures necessary.
Eye protection	Not required under normal conditions.
Hand protection	Not required under normal conditions.
Skin protection	Protective clothing (EN 340)
Other	
Respiratory protection	Not required under normal conditions.
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	none

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 4 / 8

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

internation on sacre phycical and	enemiea prepertiee
Form	compressed gas
Color	colourless
Odor	odourless
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	no
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	No information available.
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	not applicable
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable

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

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

none

10.6 Hazardous decomposition products

No hazardous decomposition products known.

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



in the

Version 01

Page 5 / 8

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.:

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 not fulfilled.
General remarks	
	The toxicity data listed pertaining to the ingredients are intended for those working in medicinal professions, experts for occupational health and safety and toxicologists.

SECTION 12: Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

Product

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

not applicable

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

None known.

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 6 / 8

SECTION 13: Disposal considerations

Air transport in accordance with IATA 2

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	
		For recycling, consult manufacturer.
	Waste no. (recommended)	0604
	Contaminated packaging	
		Uncontaminated packaging may be taken for recycling.
	Waste no. (recommended)	150103 150101 150104
SEC	TION 14: Transport information	
14.1	UN number	
	Transport by land according to ADR/RID	3164
	Inland navigation (ADN)	3164
	Marine transport in accordance with IMDG	3164
	Air transport in accordance with IATA	3164
14.2	UN proper shipping name	To the events the ADD is not achieved after an actic beam dation 504
	Transport by land according to ADR/RID	To the regulations ADR is not subject after special regulation 594
	Inland navigation (ADN)	To the regulations ADR is not subject after special regulation 594
	Marine transport in accordance with IMDG	To the regulations IMDG is not subject after special regulation 283
	Air transport in accordance with IATA	Articles pressurized pneumatic
	- Label	
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

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 7 / 8

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 An	nex II of MARPOL and the IBC Code
	not applicable	
SEC	TION 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	none
	- VOC (2010/75/CE)	0%
15 2	Chemical safety assessment	

15.2 Chemical safety assessment

SECTION 16: Other information

not applicable

16.1 Hazard statements (SECTION 03)

H280 Contains gas under pressure; may explode if heated.

Ferdinand Bilstein GmbH + Co. KG

Date printed 06.05.2019, Revision 06.05.2019



Version 01

Page 8 / 8

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

Press. Gas (Compressed gas): H280 Contains gas under pressure; may explode if heated. (On basis of test data)

Modified position

none