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Munich, 24.10.2023

Material Declaration of Conformity (M-DoC)

- European Directive 2006 / 66 / EC (Batteries)
- European DIRECTIVE 2011/65/EU (RoHS II) PULS Statement
- Chinese MIIT Order 32 (China-RoHS 2)
- European REACH REGULATION (EC)1907/2006
- European POP Regulation (EU) 2019/1021
- PULS Position on the Demand for "Halogen-Free Products"
- Free of paint wetting impairment substances (LABS) in accordance to VDMA 24364

PULS Sales-number / Model Designation

UZB12.051

European Directive 2006/66/EC (Batteries)

The declared **VRLA Industrial Built-in Battery** meets the requirements of DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 September 2006 on batteries and accumulators and waste batteries and accumulators.

VRLA Industrial Batteries, must be collected and sent for recycling at the end-of-life.

PULS distributes industrial batteries as an assembly for further processing in their DC-UPS systems. In its role as a distributor of industrial batteries, PULS is therefore obliged to take back used batteries. The disposal itself is carried out via the return system by the battery manufacturer.

The take-back obligation includes a free return of batteries in close proximity to the point of sales. PULS offers its customers the service of a free take-back of all waste batteries at all PULS sales offices and also at the following address:

PULS GmbH Return Centre c/o Kühne & Nagel (AG & Co.) KG Bornaer Str. 205 09114 Chemnitz Germany

Geschäftsführer: Bernhard Erdl Registergericht München, HRB 64 293 USt-ID: DE129702224

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HypoVereinsbank München IBAN: DE04 7002 0270 0002 4014 01 BIC: HYVEDEMM 5.0 - 3.0 DZ-Bank München IBAN: DE89 7016 0000 0000 0922 16 BIC: GENODEFF701



European Directive 2011/65/EU (RoHS II) - PULS Statement

The declared **VRLA Industrial Built-in Battery** do not fall under the scope of DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Paragraph (Recital) 14 of above Directive states:

"This Directive should apply without prejudice to Union legislation on safety and health requirements and specific waste management legislation, in particular Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and Regulation (EC) No. 850/2004."

Paragraph (Recital) 29 of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators stated: "Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment does not apply to batteries and accumulators used in electrical and electronic equipment."

Chinese MIIT Order 32 (China-RoHS 2)

The declared **VRLA Industrial Built-in Battery** meets the Measures for Restriction of the Use of Hazardous Substances in Electrical & Electronic Products Order No. 32 (China-RoHS II) of the Chinese Ministry of Industry and Information Technology (MIIT).

Hazardous Substance Control Table in compliance with Chinese SJ/T11364-2014 for the declared device.

	有毒有害物质或元素 Toxic or hazardous Substances and Elements						
部件名称 Part Name	铅 Lead (Pb)	汞 Mercury (Hg)	镉 Cadmi- um (Cd)	六价铬 Hexavalent Chromium (Cr (VI))	多溴联苯 Polybrominat- ed biphenyls (PBB)	多溴二苯醚 Polybrominat- ed diphenyl ethers (PBDE)	
Battery	Х	0	0	0	0	0	
O: 表示该有毒有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下 O: Indicates the toxic or hazardous substance contained in all of the homogeneous materials for this part is within the limit requirement in GB/T 26572.							
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。 X: Indicates the toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is outside the limit requirement in GB/T 26572							
环保期限(EFUP)的产品及其部件是每个列出的符号,除非另有标明。使用期限只适用于产品在产品手册中规定的条件下工作							
The Environmentally	Friendly Peri	od (FFUP) fo	r the product	and its parts a	are per the symb	ol listed, un-	

The Environmentally Friendly Period (EFUP) for the product and its parts are per the symbol listed, unless otherwise marked. The Period of use is valid only when the product is operated within the conditions defined in the product manual.

The EFUP of the declared battery is at least 6 years. The battery is marked with following EFUP symbol:





European REACH Regulation (EC) 1907/2006

As a manufacturer of electronic power supplies, PULS GmbH is a "downstream user" with regards to the Regulation for the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Therefore, PULS is providing information only on non-chemical articles (products). In principle, PULS GmbH is not subject to any obligation to register or to compile material safety data sheets.

PULS hereby confirms that its **VRLA Industrial Built-in Batteries** used in PULS DC-UPS or Battery Modules comply with the legal obligations regarding Article 33 and the restrictions outlined in Annex XVII of the European REACH Regulation 1907/2006 which came into force on 01.06.2007.

PULS and its suppliers will continuously review the actual ECHA "Candidate List" for additions and updates and act accordingly in compliance with REACH regulations. The actual candidate list is provided on the European Chemicals Agency website at:

https://echa.europa.eu/candidate-list-table

The information requirement of REACH Article 33 is met by considering the ECJ-Judgment (Case C-106/14) for calculating the SVHC content in articles.

The SVHC weight calculation is done in recommendation according to the - ECHA Guidance on requirements for substances in articles.

Within PULS supply chain the company received the following REACH Article 33 information that the declared **VRLA Industrial Built-in Battery** contain component(s) with the following SVHC (Article 59) listed substances >0.1% by weight.

Article Group	SVHC listed substances > 0.1 % by weight / EC / CAS		
Battery	Lead (about between 60-70%) / 231-100-4 / 7439-92-1		
SCIP-ID	d190d751-0e0d-4837-af82-aa70b3a8ba50		

MSDS (Material Safety Data Sheets) see the <u>Downloads area</u> on our website.

Note: The technical documentation as proof of compliance with the applicable REACH Regulation 1907/2006 is given in accordance with *EN IEC 63000:2018 (Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances).*

European POP Regulation (EU) 2019/1021

PULS confirms the Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (POP).

For the declared **VRLA Industrial Built-in Battery** there is to-date no evidence within our supply chain that:

- our products contain articles with prohibited substances from Annex I of POP regulation.
- there is any use of exemption from control measures acc. Article 4 (see additionally Annex I) of POP regulation.

Note: The technical documentation as proof of compliance with the applicable POP Regulation (EU) 2019/1021 is given in accordance with *EN IEC 63000:2018 (Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances).*



Demand for "Halogen-Free Products"

Concerning the requirement for halogen-free design of products, PULS GmbH aligns with the ZVEI Positioning Paper detailing the Demand for "Halogen-Free Products" in the Electrical and Electronics Industry (Edition: Oct. 2010).

Based on the above-mentioned paper, PULS issued the following "Halogen-free" affirmations regarding materials contained in the declared **VRLA Industrial Built-in Battery**:

- Plastic or chemical materials (e.g. housing components, sliders, connectors, terminals, glue, heat conductive paste, etc.) do not contain halogens.
- All other material shall contain halogens according to IEC 61249-2-21, with max. 1500 ppm halogens in total (max. 900 ppm bromine; max. 900 ppm chlorine) as far as is possible within the state of the art and/or economic viability.

*ZVEI = German Electrical and Electronic Manufacturers' Association

Free of paint wetting impairment substances (LABS) in accordance to VDMA 24364

The declared **VRLA Industrial Built-in Battery** is free of paint wetting impairment substances (LABS). The investigation for substances that impair paint wetting was carried out in accordance with VDMA 24634: 2018-05. The results are shown in the table below:

Test Report	Test class	Lacquer type	Designation of the LABS conformity
LAB-20-839	C1	solvent + water based (L/W)	VDMA24364-C1-L/W

Name and address of the	PULS GmbH
responsible manufacturer	Elektrastraße 6
	81925 Munich
	Germany

Friedrich Haunschild*

Friedrich HaunschildExpert Material Compliance

*The M-DoC is valid with electronical signature.

Attention: Notes on the validity of this M-DoC edition:

This issued M-DoC contains the latest information from our supply chain for material declaration in relation to the laws and regulations as listed here. The M-DoC is updated regularly, especially when new information on the material declaration from our supply chain is available or updated laws and regulations require a



new edition. This M-DoC for VRLA Industrial Built-in Batteries remains valid until a new one is issued and published on our website. It is therefore not necessary to ask whether a newer version is available.