

Munich, 04.09.2023

## Material Declaration of Compliance (M-DoC)

- European **DIRECTIVE 2011/65/EU (RoHS II)**
- European **REACH REGULATION (EC)1907/2006**
- U.S. EPA **TSCA Section 6(h) - PBTs**
- 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**

<b>PULS Sales-number / Model Designation</b>
<b>UZO24.121</b>

### European **DIRECTIVE 2011/65/EU (RoHS II)**

The declared device meets regulations regarding the restriction in the use of certain hazardous substances in electrical and electronic equipment according to the **DIRECTIVE 2011/65/EU (RoHS II)** amended by **DIRECTIVE (EU) 2017/2102**.

The RoHS II conformity of the declared device has been in effect since the date of market launch and at the earliest when **DIRECTIVE 2011/65/EU** come into force.

The declared device meets the restricted substances referred to in Article 4 (1) and maximum concentration values by weight of homogeneous materials according to Annex II.

Annex II to the Directive 2011/65/EU was amended by **DIRECTIVE (EU) 2015/863**. PULS confirms compliance with these additional substance restrictions.

Applications exempted from the restriction in Article 4(1) according to Annex III are:

<b>none</b>
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Note: The technical documentation as proof of compliance with the applicable RoHS **DIRECTIVE 2011/65/EU** 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 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 electronic power supplies 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.

For the declared device there is to-date no evidence within our supply chain that our product contain articles with a substance which is listed in the ECHA “candidate list” SVHC (Article 59) with a weight of >0.1%.

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)*.

## U.S. EPA TSCA Section 6(h) - PBTs

The United States Environmental Protection Agency (EPA) requires under the Toxic Substances Control Act (TSCA) Section 6(h) restrictions and information obligation regarding the 5 PBT substances.

For the declared device there is to-date no evidence within our supply chain that our products contain articles with prohibited PBT substances listed in TSCA Section 6(h).

Note: The technical documentation as proof of compliance with the applicable TSCA Section 6(h) (USA) is given in accordance with *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 device 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 device:

- 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 device 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 responsible manufacturer

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**Friedrich Haunschild\***

Expert 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 PULS standard devices 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.