

# Peelable solder masks of the series PSM 13.990

- For the partial covering of assembled PCBs undergoing wave soldering
- ease of application, "ready -to-use"
- dries at room temperature
- peelable
- free from solvents, silicones, oils and acids

## Characteristics

	PSM 13.910 FLZ	PSM 13.990 NV	PSM 13.990 HV
Colour/appearance	yellowish	white	
Solids content ISO 3251, 1 h, 125 °C [257 °F], 1 g weighed quantity	65 ± 5 % by weight	65 ± 5 % by weight	65 ± 5 % by weight
Viscosity* at 20 °C [68 °F] DIN EN ISO 3219	2,000 ± 500 mPas	2,000 ± 500 mPas	3,500 ± 500 mPas
Density at 20 °C [68 °F]	0.94 ± 0.05 g/m <sup>3</sup>	0.94 ± 0.05 g/m <sup>3</sup>	0.94 ± 0.05 g/m <sup>3</sup>

\* measured with Haake RS 600, C 20/2°, D = 50 s<sup>-1</sup>, viscosity measuring unit supplied by:  
Thermo Fisher Scientific, Dieselstraße 4, 76227 Karlsruhe, Germany  
Phone +49 721 4094-444, Fax +49 721 4094-300, [www.thermo.com](http://www.thermo.com)

Indices: PSM = Peelable Solder Mask, FLZ = fluorescent, NV = low viscous, HV = highly viscous

## Processing



Please read this technical report and the publications listed below carefully before using the product. These sheets are enclosed with the first shipment of product or sample.

### MSDS

The corresponding material safety data sheet contains detailed information and characteristics on safety precautions, environmental protection, transport, storage, handling and waste disposal.

### TI

[Technical information TI 15/3](#) "Protective measures when using chemicals including lacquers, casting compounds, thinners, cleaning agents"

The peelable solder masks of the series **PSM 13.990** are applied directly from the squeeze bottle in thin layers (approx. 1 mm).

- Ensure that the surface to be coated is clean, dry and free from grease, oil or other residues.
- Do not apply the peelable solder masks of the series **PSM 13.990** on copper/OSP surfaces since this product contains ammonia.
- Workplace and tools can be cleaned with water.

Since the many different permutations make it impossible to evaluate the whole spectrum (parameters, reactions with materials used, chemical processes and machines) of processes and subsequent processes in all their variations, the parameters we recommend are to be viewed as guidelines only that were determined in laboratory conditions. We advise you to determine the exact process limitations within your production environment, in particular as regards compatibility with your specific follow-up processes, in order to ensure a stable fabrication process and products of the highest possible quality.

The specified product data is based upon standard processing conditions/test conditions of the mentioned norms and must be verified if necessary while observing suitable test conditions on processed products.

Feel free to contact our application technology department (ATD) if you have any questions or for a consultation.

## Safety recommendations

- When using chemicals, the common precautions should be carefully noted.

## Drying/curing

Drying at room temperature takes approx. 8 h depending on the layer thickness applied. The process can be accelerated by oven curing, e.g. for 5 min at 80 °C [176 °F].

The peelable solder mask must be completely dry before soldering; it will turn colourless when dried. Adjusted for fluorescence, **PSM 13.910 FLZ** can be made visible under UV light (black light).

## Standard packaging

Squeeze bottle of 250 mL

## Shelf life and storage conditions



Shelf life: In sealed original containers at least 6 months



Storage conditions: +5 °C to +25 °C [+41 °F to +77 °F]



Protect against frost

For warehousing reasons, isolated cases may occur where the shelf life upon shipment is less than the shelf life indicated in this technical report. However, it is ensured that our products have **at least** two-thirds of their shelf life remaining when they leave our company. Labels on containers show shelf life and storage conditions.

## Disclaimer

All descriptions and images of our goods and products contained in our technical literature, catalogues, flyers, circular letters, advertisements, price lists, websites, data sheets and brochures, and in particular the information given in this literature are non-binding unless expressly stated otherwise in the Agreement. This shall also include the property rights of third parties if applicable.

The products are exclusively intended for the applications indicated in the corresponding technical data sheets. The advisory service does not exempt you from performing your own assessments, in particular as regards their suitability for the applications intended. The application, use and

processing of our products and of the products manufactured by you based on the advice given by our Application Technology Department are beyond our control and thus entirely your responsibility. The sale of our products is effected in accordance with our current terms of sale and delivery.

**ATTENTION! For new products, according to preliminary technical reports, adequate practical results are not always available which would permit a comprehensive assessment of such a product. It is therefore imperative to exercise particular care in the testing of such products with regard to the application intended!**

Any questions? We would be pleased to offer you advice and assistance in solving your problems. Samples and technical literature are available upon request.

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