

PRIMER FMP HC

Primer for silicone rubber

PRIMER FMP HC is a solution of reactive silanes in a mixture of isoalkanes. After the solvent has evaporated, a rigid film of silicone resin is formed on exposure to atmospheric humidity at ambient or elevated temperature and firmly adheres to the substrate. The catalysed silicone rubber applied on top will then form a tight bond to this resin film during vulcanization.

Technical data

Properties Uncured

Property	Condition	Value	Method
Content white spirit	-	85 %	-
Density	25 °C 1013 hPa	0.732 g/cm ³	calculated
Flash point	-	2 °C	DIN 53213
Ignition temperature	-	375 °C	DIN 51794
Viscosity, kinematic	-	0.8 mm ² /s	ISO 3104

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Application details

Surfaces to be primed should be dry and free from grease, oil or other contaminants. The surface should first be cleaned with a non-polar solvent such as mineral spirits (at a boiling range of 80 °C up to 140 °C), followed by a polar solvent, preferably acetone. Loose particles must be removed, and very smooth surfaces should be roughened by grinding. The primer can be applied with a brush, by dipping or spraying. On relatively smooth, non-absorbent surfaces such as aluminum, the primer should be applied as thinly as possible and free of air bubbles.

In some cases further dilution with white spirit can improve adhesion, typical dilution ratio is between 1:1 and 1:3 primer/white spirit b.w). Adhesion tests have to be carried out with original substrates prior to the final use.

After application the reaction of the primer film to firmly adhere to the surface needs some time. Recommended reaction time is between about 1 hour at ambient temperature (relative atmospheric humidity must be at least 40 % and should be monitored using a hygrometer) or alternatively 10 minutes at 100 °C (the latter only applies to metallic substrates). Tests for optimal conditions are recommended. The catalyzed silicone rubber should be applied to the primer coat immediately after the drying or heating process, if possible, but at the latest after 6 hours since otherwise a drop in adhesive strength may occur. **IMPORTANT:** Maximum adhesive strength will only be achieved after 4 days.

In many cases the initial adhesion directly after vulcanization of the rubber is already sufficient for handling the composite. Once opened, containers of WACKER Primer FMP HC have to be kept well sealed and stored in a cool and dry place. Precipitations or turbidities in the bottle do indicate moisture access, commonly caused by repeated opening or insufficiently sealed bottles. In this case the primer reactivity can be diminished.

PRIMER FMP HC is a bonding agent which is preferably used with addition-curing RTV-2 silicone rubbers and LSR from the WACKER ELASTOSIL® series to achieve adhesion to metallic and non-metallic substrates.

Detailed processing instructions are given in our brochure “ROOM TEMPERATURE VULCANIZING (RTV) SILICONES - MATERIAL AND PROCESSING GUIDELINES

Packaging and storage

Storage

PRIMER FMP HC should be stored between 5 °C and 30 °C in the tightly closed original container. The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Due to its content of aliphatic hydrocarbons, PRIMER FMP HC is subject to the same safety regulations as these, i. e., it is flammable liquid (flash point 2 °C). Appropriate precautions are obligatory. Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained via our sales office.

QR Code PRIMER FMP HC



For technical, quality or product safety questions, please contact:

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