Intended use

Mipa 1K-UV-Füller is a high-quality, UV-drying filler for fast and economic refinishes, which can be sanded already after 5 minutes irradiation by a UV LED-Light or mercury vapour lamp. Alternatively, sanding is also possible after a 4-5 minutes exposure to direct sunlight. It is therefore possible to save significantly heating-related costs. In the same time, cycle times are reduced since the painting process is not interrupted by heating intervals. Further advantages of Mipa 1K-UV-Füller are as follow:

One-component system, ready for use.Therefore it can be used immediately and does not produce any paint waste because of pot life-related hardening.

Substrates do not need be heated, which protects especially plastic substrates from deforming and overheating. In addition, there is no need to observe a cooling phase prior to sanding.

After curing, this filler provides a very hard surface with excellent sanding properties.

Outstanding mechanical and chemical resistance of the filler surface

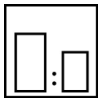
Mipa 1K-UV-Füller is perfectly suitable for partial car coatings and spot repairs. Very good adhesion on steel, iron, aluminium and galvanized substrates. In addition, it offers direct adhesion on following plastic substrates: PU, ABS, PVC, PC and PS. Further types of plastic can be recoated after the application of Mipa 1K-Kunststoffprimer or Mipa 1K-Haftpromoter (find more information about plastic types in the technical data sheets of Mipa 1K-Kunststoffprimer and Mipa 1K-Haftpromoter).

Spreading rate: 7 - 8 m²/l (for 80 µm DFT)

Processing instructions

Colour

grey glazing



Mixing ratio

Hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
–	–	–

Hardener

for complete paintwork	for partial paintwork
–	–

Pot life

none, if stored in a lightproof area

Thinner

–

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

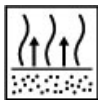
Spray viscosity

ready for use
after a longer period of time, stir the material thoroughly
after a longer period of time in the gravity cup, stir the material thoroughly

gravity spray gun	Airmix/Airless
16 - 18 s 4 mm DIN	--

Application mode

Application mode	Hardener	pressure (bar)	nozzle (mm)	spray passes	Thinner
gravity spray gun (high pressure)	--	1,6 - 2	1,0 - 1,2	2, max. 3	--
HVLP (low pressure)	--	1,6 - 2	1,0 - 1,2	2, max. 3	--
HVLP / internal nozzle pressure	--	0,7	--	--	--



Flash-off time

in case of 2 coats without intermediate flash-off

in case of 3 coats: prior to 3rd coat

5 min. UV curing + intermediate sanding

final flash-off: 5 min prior to UVcuring

Dry coat thickness

80 - 100 µm for 2 coats

max. 150 µm for 3 coats

Do not apply covering. Avoid the

application of too thick layers!

Drying time

object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	--	--	--	--	--

Note

Storage: at least 1 year at room temperature (20°C) in unopened original container

VOC Regulation : EU limit value for this product (category B/c): 540 g/l
This product contains max. 190 g/l of VOC.

Processing conditions: From +15 °C and up to 80 % relative air humidity. Ensure an adequate air ventilation.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

Processing instructions:

Due to the system, storage causes phase separation of the material in the container. This is specific to the product and can be removed by thorough mixing. Phase separation may also happen when this product is kept in the gravity cup for a longer period. Therefore, it is necessary to thoroughly stir the filler.

Drying:

UV LED-Light: approx. 5 min
Hg-Lamp (mercury vapour lamp) approx. 5 min
Direct sunlight: approx. 4 - 5 min, please observe: When drying with sunlight, the dry film thickness of 80 µm must not be exceeded, otherwise through-drying problems may occur.

Note:

Although, the use of very powerful lamps shortens the drying time, this sudden drying can lead to severe coating damage such as wrinkling and cracking and/ or adhesion problems. Therefore, it is strongly recommended not to use such lamps or to make sure that the specified UV-drying times are observed.

When drying, consider also the time, which is needed to achieve full light power:

Hg-lamps (mercury vapour lamps) require a warm-up time of approx. 3 minutes and manufacturer's instructions must be observed respectively.

The recommended lamp distance to the object should be 20-30 cm.

If the light field of the UV LED-Light is too little to cover at once the filler surface to be dried, the lamp must be moved overlapping the area already dried. Care must be taken to ensure that all partial areas are irradiated sufficiently for a homogeneous through drying of the entire surface.

The UV drying time depends generally on following factors:

- Lamp intensity and UV spectrum
- rate of wear of the illuminant
- lamp distance
- applied coat thickness
- size of the refinished area

The recommended dry film thickness of 80 - 100 µm for 2 coats must be observed. If higher coat thicknesses are required (max. 150 µm), it is necessary to do an intermediate UV-drying after the application of the 2nd coat. When drying with LED lamps, especially in case of thicker layers, the drying time of 5 minutes must be observed or, if necessary, extended to ensure complete curing of the filler layer. By using mercury vapour lamps, which have a higher radiation intensity, the drying times can generally be reduced.

Substrate preparation:

The substrate must be clean, dry and free from grease. Sand slightly the surface and degrease with Mipa Silikonentferner. Remove non adhering old paintworks and primers.

Sand aluminium and galvanized substrates with grain P 220, steel with P 120. After sanding clean again thoroughly with Mipa Silikonentferner.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

Plastics:

Before application, reheat the parts to be painted for 60 minutes at 60°C.

Degrease the surface thoroughly with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.

Sand thoroughly with MP Softpad super fine using Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.

Clean again with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.

Allow parts to dry completely.

ATTENTION: Mould release agents must be removed completely! After the aforesaid preparation we recommend doing a wetting test with water. If the water rolls off quickly repeat the pre-treatment.

Important: Do not exceed the maximum dry film thickness of 100 µm on plastics.

Application:

apply 2 coats (dry film thickness 80 - 100 µm) without intermediate flash-off +
5 min. flash-off at room temperature +
5 min. UV drying

3 coats (dry film thickness max. 150µm):
apply 2 coats without intermediate flash-off +
5 min. flash-off at room temperature +
5 min. UV drying +
intermediate sanding with P 400 - 500 +
apply 3rd coat +
5 min. flash-off at room temperature +
5 min. UV drying +

Important: Mipa 1K-UV-Füller must not be applied covering, The application of too thick layers must be avoided, otherwise adhesion and curing problems may occur.

Information about sanding of the filler:

In case of one-layer topcoat use sanding paper P 400 for dry sanding or P 600 for wet sanding. In case of a two-layer topcoat we recommend to use the sanding paper P 500/ 600 for dry sanding and P 800/ 1000 for wet sanding.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com