Intended use

Mipa 2K-HS-Express-Filler FX 4 is a high-quality two-component filler for fast and economic car refinishing (express technology) that generally doesn't require oven drying. Mipa 2K-HS-Express-Filler FX 4 cures fast already at room temperature (20 °C) and can be sanded after a drying of only 35 minutes (depending on coat thickness and temperature). 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. If required, oven drying is also possible. Hereby full sandability is obtained after a drying of approx. 10 minutes at 60 °C or 20 minutes at 40 °C plus cooling time. Mipa 2K-HS-Express-Filler FX 4 is perfectly suitable for partial car coatings and spot repairs. After pre-treatment with Mipa Vorreiniger Express, this filler provides very good adhesion on steel, iron, aluminium and galvanized substrates.

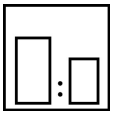
Spreading rate: 3,8 - 4,2 m²/l (for 80 µm DFT)

Processing instructions



Colour

grey



Mixing ratio

Hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
Mipa 2K-Härter H 5	--	4 : 1
Mipa 2K-HS-Härter HS 5	--	7 : 1



Hardener

for complete paintwork	for partial paintwork
--	--



Pot life

approx. 20 - 30 min at 20 °C



Thinner

H 5: 15 % Mipa 2K-Verdünnung normal V 25

HS 5: 35 % Mipa 2K-Verdünnung normal V 25



Spray viscosity

gravity spray gun	Airmix/Airless
15 - 20 s 4 mm DIN	--

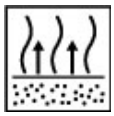


Application mode

Application mode	Hardener	pressure (bar)	nozzle (mm)	spray passes	dilution (%)
gravity spray gun (high pressure)	--	1,6 - 2	1,3 - 1,6	2 - 4	15 or 35
HVLP (low pressure)	--	1,6 - 2	1,3 - 1,6	2 - 4	15 or 35
HVLP / internal nozzle pressure	--	0,7	--	--	15 or 35

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MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49 8703 92 20 · Fax: +49 8703 92 21 00 · mipa@mipa-paints.com · www.mipa-paints.com



Flash-off time

allow first coat to dry to a matt finish, the subsequent coats don't require intermediate or final flash-off

Dry coat thickness

80 - 150 µm

on plastics: 40 - 60 µm



Drying time

object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
20 °C	approx. 5 min	approx. 10 min	--	approx. 35 min	--
40 °C	--	--	--	20 min	--
60 °C	--	--	--	10 min	--

Note

Storage: At least 3 years in unopened original container.

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

Processing conditions: From +10 °C and up to 80 % relative air humidity. Ensure an adequate air ventilation.

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Processing instructions:

Infrared drying:

Infrared drying shortwave: approx. 5 min.
Infrared drying mediumwave: approx. 10 min.

Do not apply on thermoplastic substrates.

Substrate preparation:

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

When recoating bare metal surfaces, it's necessary to pre-treat them as follows:

Pre-treatment: Sand aluminium and galvanised substrates with P 220, steel with P 120. After sanding clean with Mipa Silikonentferner.

Then apply evenly Mipa Vorreiniger „Express" by means of MP Entfettungstüchern or MP Microfasertüchern (lint-free) in a criss-cross fashion on the bare metal and assure that the surface stays moistened for at least 1 minute to create an optimal conversion layer.

After a flash-off time of approx. 2 - 3 minutes (metal surface must have dried) recoat with Mipa 2K-HS-Express-Filler FX 4. The recoating must be done within 15 minutes.

Please consider that only one type of metal per cloth is treated. Rags that have started to dry or have dried completely must not be reused. If moist clothes are kept in a resealable box consider the following notes:

After removing a cloth, the container must be sealed again hermetically.
Already used rags are to be used up within a day and must not be returned to the original container. To prevent dehydration, these wipes can be stored separately in a plastic container or plastic bag.

If there is too much cleaning agent liquid on the bottom of the container, place the container horizontally and ensure by rolling that the cloths are soaked.

The non-use of Mipa Vorreiniger „Express" is analytically detectable.

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.

If you sand immediately after the minimum drying time, we recommend using flexible sanding discs or MP Interface Pad.

After a through drying of 1 hour at room temperature (20 °C) also standard sanding discs can be used.
This additional drying time applies for all kinds of drying (drying at room temperature or in oven).

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Application on plastic substrates

Combined with Mipa 1K-Kunststoffprimer, Mipa 2K-HS-Express-Filler FX 4 can be applied to following plastics: A-PET, POM, PU, ABS, PVC, PC, PA and PP/EPDM

The coating system is as follows:

Pre-treatment: Reheat the object to be painted for 60 minutes at 60 °C prior to coating. Degrease the surface thoroughly with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner. Sand 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: Releasing agents must be removed completely! After the aforesaid preparation we recommend to do a wetting test with water. If the water rolls off quickly repeat the pre-treatment.

Due to very different kinds of plastics and mixtures available on the market we recommend testing beforehand on the original plastic substrate.

Adhesion promoter: Mipa 1K-Kunststoffprimer, DFT 3 - 5 µm, recoatable after approx. 10 min at room temperature.

Filler: Mipa 2K-HS-Express-Filler FX 4, DFT 40 - 60 µm.

For painting plastic parts - which must first be primed with Mipa 1K-Kunststoffprimer - Mipa 2K-HS-Express-Filler FX 4 can be mixed with max. 15 % Mipa 2K-Elastic. This increases elasticity and promotes safe assembly of deformable parts such as bumpers. Depending on the prevailing ambient conditions, e.g. temperature or humidity, the drying times indicated may be extended by the addition of Mipa 2K-Elastic.

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