

Intended use

Highly resistant 2K polyurethane-acrylic paint for a scratch-resistant and robust black coating of truck bed surfaces (e.g. Pick-Up truck beds) and of all heavy duty surfaces on commercial vehicles, off-road vehicles, camping cars, trailers and SUVs etc.

Possible application areas:

- bodies of SUVs and off-road vehicles
- rims of SUVs and off-road vehicles
- floors and storage areas in caravans
- underbodies and chassis
- bullbars, running boards, roof racks, spare wheel covers and so on
- fender well
- access ramps, decks of recovery vehicles and trailers

Beside its very high wear resistance Mipa Protector provides also an excellent mechanical and chemical resistance. The very high vertical stability allows applying extremely high-build coatings. Easy to use since 750 ml paint material is already filled in 1 litre cans for underbody sealants. Just add 250 ml of the hardener Mipa 2K-Härter H 5 or H 10. Shake the can vigorously and apply the mixture using an underbody sealant spray gun or paint roller.

Properties:

- high UV and weathering resistance
- excellent shock and scratch resistance
- high resistance to fuels and oils
- excellent water resistance
- provides noise reduction
- short-term temperature exposure: 180 °C
- permanent temperature exposure: 150 °C

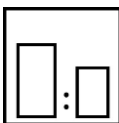
Spreading rate: 3 m²/l for 200 µm dry film thickness

Processing instructions



Colour

black



Mixing ratio

hardener

Mipa 2K-Härter H 5 / H 10

by volume lacquer :hardener

3 : 1 or

750 ml Mipa Protector in 1,1 litre cans for underbody sealants +
250 ml Mipa 2K-Härter H 5 or H 10 + approx. 2 minutes shaking



Hardener

for complete paintwork

Mipa 2K-Härter H 10

for partial paintwork

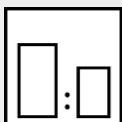
Mipa 2K-Härter H 5



Pot life

30 - 45 min with Mipa 2K-Härter H 5 at 20 °C

1 - 1,5 h with Mipa 2K-Härter H 10 at 20 °C



Mixing procedure for applications with underbody sealant spray gun (UBS)

1. Shake vigorously Mipa Protector paint material.
2. Open the can, add 250 ml of hardener, close the lid and shake vigorously for approx. 2 minutes.

Mixing procedure for applications with gravity spray guns / paint roller

1. Shake vigorously Mipa Protector paint material.
2. Pour the paint in a mixing cup, add the hardener in a mixing ratio of 3 : 1 by volume and mix thoroughly.
3. Add the thinner and mix thoroughly.

Now the mixture is ready to be applied by spraying or rolling!

Thinner

Mipa 2K-Verdünnung



Spray viscosity

Gravity spray gun

See application mode

UBS spray gun / roller



undiluted

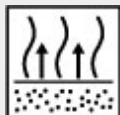


Application mode



Application mode	nozzle (mm)	dilution	How to apply a rough texture
MP SprayGun UBS/HV	-	-	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 - 4 bar until full coverage is achieved. 2. Observe flash-off time of between 10 min and 1 h. 3. To achieve the desired texture reduce the pressure to 1 - 1,5 bar and increase the spray distance up to approx. 45 - 60 cm.
HVLP (low pressure)	2,5	10 %	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 bar until full coverage is achieved. 2. Observe flash-off time of between 10 min and 1h. 3. To achieve the desired texture reduce the pressure to approx. 1 bar and increase the spray distance to approx. 40 - 50 cm.
Texture roller	-	-	<ol style="list-style-type: none"> 1. Apply evenly and overlapping with a texture roller, e.g. MP Strukturroller, until opacity is achieved. If full hiding power is not yet achieved, a second coat can be applied after an intermediate flash-off time of approx. 20 min.

	Application mode	nozzle (mm)	dilution	How to apply a medium texture
	MP SprayGun UBS/HV	-	-	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 - 4 bar until full coverage is achieved. 2. Observe flash-off time between of 10 min and 1 h. 3. To achieve the desired texture reduce the pressure to approx. 2 bar and increase the spray distance to approx. 45 - 60 cm.
	HVLP (low pressure)	2,0 - 2,5	15 %	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 bar until full coverage is achieved 2. Observe a flash-off time between of 10 min and 1 h. 3. To achieve the desired texture reduce the pressure to approx. 1,5 bar and increase the spray distance to approx. 45 - 60 cm.
	Short nap roller	-	-	<ol style="list-style-type: none"> 1. Apply evenly and overlapping with a short nap roller, e.g. MP Heizkörperwalze Masterstreif, until opacity is achieved. If full hiding power is not yet achieved, a second coat can be applied after an intermediate flash-off time of approx. 20 min.
	Application mode	nozzle (mm)	dilution	How to apply a fine texture
	MP SprayGun UBS/HV	-	-	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 - 4 bar until full coverage is achieved. 2. Observe flash-off time of between 10 min and 1 h. 3. To achieve the desired texture, set the pressure to 3 - 4 bar and increase the spray distance to approx. 90 cm.
	HVLP (low pressure)	1,6 - 1,8	20 %	<ol style="list-style-type: none"> 1. Apply a uniform coat with a pressure setting of 2 bar until full coverage is achieved. 2. Observe a flash-off time of between 10 min and 1 h. 3. To achieve the desired texture reduce the pressure to approx. 2 bar and increase the spray distance to approx. 60 cm.
	Foam roller	-	-	<ol style="list-style-type: none"> 1. Apply evenly and overlapping with a foam roller, e.g. MP Heizkörperwalze Premium, until opacity is achieved. If full hiding power is not yet achieved, a second coat can be applied after an intermediate flash-off time of approx. 20 min.



Flash-off time

10 - 60 min between coats

10 - 15 min prior to oven drying

Dry film thickness

100 - 380 µm



Drying time

Object temperature.	dust dry	set to touch	ready for assembly	sandable	recoatable
20 °C	15 - 20 min	3 - 4 h	24 h	--	--
60 °C	--	30 min	1 - 2 h	--	--

Fully cured after 7 days (at 20 °C).

Note

- Storage:** at least 3 years in unopened original container.
- VOC Regulation:** EU limit value for this product of category A/j: 500 g/l - B/e 840 g/l
This product contains max. 500 g/l of VOC.
- Processing conditions :** from +10 °C and up to 80 % relative air humidity. Ensure adequate air ventilation.
- Substrate preparation:**
- steel: clean, sand slightly if necessary (remove any rust and mill scale) and degrease with Mipa Silikonentferner
 - zinc: clean the surface with the ammonia solution Mipa Zinkreiniger
 - aluminium: clean, sand slightly and degrease with Mipa Silikonentferner
 - plastic substrates: Before application, reheat the object to be painted for 60 minutes at 60°C. 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 previously mentioned preparation, we recommend doing a wetting test with water. If the water rolls off quickly, repeat the pre-treatment.
- Application of Mipa adhesion promoters or primers for plastic substrates: e.g. Mipa 1K-Kunststoffprimer, Mipa 1K-Haftpromoter, Mipa 1K-Plastic-Grundierfiller, Mipa 2K-Multifiller, etc.
- Due to very different kinds of plastics and mixtures available on the market, we recommend testing beforehand on the original plastic substrate.
- wooden substrates: clean, sand slightly and dust off
 - GRP: clean, sand slightly and degrease with Mipa Silikonentferner
 - sound 2K-resistant paintworks: clean, sand slightly and degrease with Mipa Silikonentferner
- Proposed coating structure:** steel, zinc and aluminium:
- priming coat: suitable Mipa 1K and 2K primer and filler (e. g. Mipa Rapidfiller, Mipa Aktivprimer, Mipa 2K-Primer CF, Mipa 2K-Multifiller, Mipa EP-Primer Surfacer)
 - finishing coat: Mipa Protector (film thickness: 100 - 380 µm)

wooden substrates:

priming coat: Mipa EP-Grundierfiller or Mipa EP-Primer Surfacer

finishing coat: Mipa Protector (film thickness: 100 - 380 µm)

GRP, sound 2K-resistant paintworks:

finishing coat: Mipa Protector (film thickness: 100 - 380 µm)

or with priming coat, if irregularities must be levelled:

priming coat: suitable Mipa 2K primer and filler (e. g. Mipa 2K-Multifiller, Mipa 4+1 Acrylfiller HS, Mipa 2K-HS-Grundfiller F 54)

Application notes:

To ensure that the desired structure is achieved, we recommend making a sample.

Texture and gloss affect the colour.

To achieve an uniform texture apply the second layer as drop coat.

Spray distance and spray pressure change the texture.

Maskings or adhesive tapes which have been overcoated with Mipa Protector, must be removed immediately after application. Otherwise the fresh paint will be peeled off with the adhesive tape.

Not suitable to coat very oily and highly resinous woods (e.g. teak).

To obtain a non-slip surface just add 5-10% by weight of Mipa Grip-Additiv to the mixture of basic paint + hardener. Stir thoroughly Mipa Grip-Additiv in the mixture and apply immediately.