

### Intended use

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

Tintable with Mipa BC 2-Schicht-Basislack (basecoats), Mipa OC, Mipa PUR-HS, Mipa PUR and Pro Mix® Industry pigment pastes.

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, add the tinting material, shake again the can vigorously and apply subsequently the mixture using an underbody sealant spray gun.

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

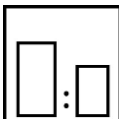
Spreading rate: 3 m<sup>2</sup>/l for 200 µm dry film thickness

### Processing instructions



#### Colour

Mipa Mix-System



#### 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

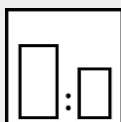
Mipa 2K-Härter H 5



#### 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/ tinting 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.
3. Open the lid, add 100 ml tinting material and shake vigorously for approx. 2 minutes

### Mixing/ tinting procedure for applications with gravity spray guns (complete set)

1. Shake vigorously Mipa Protector paint material.
2. Pour 750 ml paint in a mixing cup, add 250 ml hardener and mix thoroughly.
3. Add 100 ml tinting material plus thinner and mix thoroughly.

### Mixing/ tinting procedure for applications with gravity spray guns (lower amounts)

1. Shake vigorously Mipa Protector paint material.
2. Pour lower amounts of paint in a mixing cup, add the hardener in a mixing ratio of 3 : 1 by volume and mix thoroughly.
3. Add 10 % by volume of tinting material plus thinner and mix thoroughly.

### Now the mixture is ready for use!

To tint Mipa Protector use one of the following Mipa paint systems:

- a.) Mipa BC two-layer basecoat undiluted
- b.) Mipa OC, Mipa PUR-HS, Mipa PUR, important: The topcoats have to be first mixed with the hardener according to respective technical data sheet. 100 ml / 10 % of mixture consist of basic paint + hardener. Do not dilute!
- c.) Pro Mix® Industry pigment pastes, undiluted.



### Thinner

Mipa 2K-Verdünnung



### Spray viscosity

#### Gravity

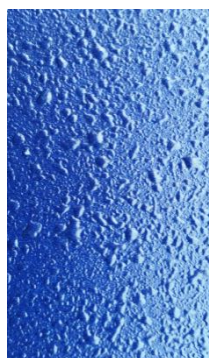
See application mode

#### UBS spray gun

undiluted



### Application mode



| Application mode     | nozzle (mm) | dilution | How to apply a rough texture   |
|----------------------|-------------|----------|--|
| MP SprayGun UBS Flex | -           | -        | <ol style="list-style-type: none"> <li>1. Apply a uniform coat with a pressure setting of 2 - 4 bar until full coverage is achieved.</li> <li>2. Observe flash-off time of between 10 minutes and 1 h.</li> <li>3. To achieve the desired texture reduce the pressure to 1 - 1,5 bar and increase the spray distance to approx. 45 - 60 cm.</li> </ol> |
| HVLP (low pressure)  | 2,5         | 10 %     | <ol style="list-style-type: none"> <li>1. Apply a uniform coat with a pressure setting of 2 bar until full coverage is achieved.</li> <li>2. Observe flash-off time of between 10 min and 1 h.</li> <li>3. To achieve the desired texture reduce the pressure to approx. 1 bar and increase the spray distance to approx. 40 - 50 cm.</li> </ol>       |



| Application mode     | nozzle (mm) | dilution |
|----------------------|-------------|----------|
| MP SprayGun UBS Flex | -           | -        |
| HVLP (low pressure)  | 2,0 - 2,5   | 15 %     |

### How to apply a medium texture

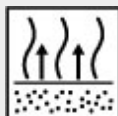
1. Apply a uniform coat with a pressure setting of 2 - 4 bar until full coverage is achieved.
  2. Observe flash-off time between of 10 min and 1 h.
  3. To achieve the desired texture reduce the pressure to approx. 2 bar und increase the spray distance to approx. 45 - 60 cm.
1. Apply a uniform coat 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.



| Application mode     | nozzle (mm) | dilution |
|----------------------|-------------|----------|
| MP SprayGun UBS Flex | -           | -        |
| HVLP (low pressure)  | 1,6 - 1,8   | 20 %     |

### How to apply a fine texture

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.
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 increase the spray distance to approx. 60 cm.



### Flash-off time

- 5 - 10 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..

|                                    |  |
|------------------------------------|--|
| <b>VOC Regulation:</b>             | EU limit value for this product of category A/j: 500 g/l - B/e: 840 g/l<br>This product contains max. 500 g/l of VOC.  |
| <b>Processing conditions:</b>      | from +10 °C and up to 80 % relative air humidity. Ensure adequate air ventilation.   |
| <b>Substrate preparation :</b>     | steel: clean, sand slightly if necessary (remove any rust and mill scale) and degrease with Mipa Silikonentferner<br><br>zinc: clean the surface with the ammonia solution Mipa Zinkreiniger<br><br>aluminium: clean, sand slightly and degrease with Mipa Silikonentferner<br><br>wooden substrates: clean, sand slightly and dust off<br><br>GRP: clean, sand slightly and degrease with Mipa Silikonentferner<br><br>sound 2K-resistant paintworks: clean, sand slightly and degrease with Mipa Silikonentferner  |
| <b>Proposed coating structure:</b> | steel, zinc and aluminium:<br><br>priming coat: suitable Mipa 1K and 2K primer and filler (e. g. Mipa Rapidfiller, Mipa Aktivprimer, Mipa 2K-Primer CF, Mipa 2K-DTM-Acryl-Schleiffiller, Mipa 2K-Multifiller, Mipa EP-Primer Surfacer)<br><br>finishing coat: Mipa Protector (film thickness: 100 - 380 µm)<br><br>wooden substrates:<br><br>priming coat: Mipa EP-Grundierfiller or Mipa EP-Primer Surfacer<br><br>finishing coat: Mipa Protector (film thickness: 100 - 380 µm)<br><br>GRP, sound 2K-resistant paintworks:<br><br>finishing coat: Mipa Protector (film thickness: 100 - 380 µm)<br><br>or with priming coat, if irregularities must be levelled:<br><br>priming coat: suitable Mipa 2K primer and filler (e. g. Mipa 2K-Multifiller, Mipa 4+1 Acrylfiller HS, Mipa 2K-HS-Grundfiller F 54) |
| <b>Application notes:</b>          | To ensure that the desired structure is achieved, we recommend making a sample.<br><br>Texture and gloss affect the colour.<br><br>To achieve an uniform texture apply the second layer as drop coat.<br><br>Spray distance and spray pressure change the texture.<br><br>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.<br><br>Not suitable to coat very oily and highly resinous woods (e.g. teak).<br><br>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.  |