Intended use

Mipa DS 4in1 Spray is a fast drying, high-build acrylic single-layer paint with excellent hiding power for coating constructions, machines, machine parts, vehicles, etc. made of steel, galvanised substrates, aluminium, GRP, wood and common plastics used in the automotive industry. The high UV and weather resistance and the corrosion protection allow the use in interior and exterior areas. Due to the wide range of applications, Mipa DS 4in1 Spray offers great time savings and flexibility for priming and painting work.

Processing instructions

Substrate

Iron, steel, zinc and aluminium, all common plastics used in the automotive sector

Pre-treatment / cleansing

Pre-clean with Mipa Silikonentferner.
Please refer to the section „Substrate preparation“ for detailed information.

Characteristics

Monolayer paint
Can be applied in thick layers
Fast drying
Excellent hiding power
Highly UV- and weather-resistant

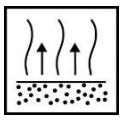
Colour / gloss level diverse RAL colours / satin gloss

Preparation

Before use, shake can vigorously for 1 - 2 minutes!

Application

Spray to test - spray distance approx. 20 - 30 cm
2 - 3 coats, dry film thickness 40 - 50 µm when used as topcoat
3 - 4 coats, dry film thickness 60 - 80 µm when used as monolayer paint



Flash-off time

3 - 5 min between coats

After use

After use, turn can upside down and spray until the valve is clean, this prevents the valve from clogging up.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)87 03/922-0 · Fax: +49(0)87 03/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

Drying time at 20 °C	
Dust dry after approx.	10 min
Set to touch after approx.	20 min
Sandable after approx.	30 - 60 min
Ready for assembly after approx.	1 - 2 h

Subsequent processing

Dry sanding:	For 1-layer topcoats P 400 For 2-layer topcoats P 500 - 600
Wet sanding:	For 1-layer topcoats P 600 For 2-layer topcoats P 800 - 1000

Processing conditions	From +10 °C and up to 80 % relative humidity. Ensure adequate air ventilation.
Storage	Can be stored for 2 years in cool and dry places.
VOC-regulation	EU limit value for the product (cat. B/e): 840 g/l This product contains max. 703 g/l of VOC.
Safety information	See safety data sheet

Processing instructions

Do not overcoat with polyester-based materials.

Substrate preparation:

The substrate must be clean and dry. Remove oil, grease, rust, mill skill, rolling skin as well as other substances impairing the function of the coating!

Remove old coatings or primers that have not cured or are not sound.

Do not use on thermoplastic substrates

Steel substrates:
1. Pre-clean with Mipa Silikonentferner.
2. Then dry sand with P 120.
3. Afterwards, degrease with Mipa Silikonentferner.

Aluminium substrates + galvanised substrates (strip galvanising / continuous hot-dip galvanising) and electrogalvanising:
1. Pre-clean with Mipa Silikonentferner.
2. Then dry sand with P 220.
3. Afterwards, degrease with Mipa Silikonentferner.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)87 03/922-0 · Fax: +49(0)87 03/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

Galvanised substrates (batch galvanising / discontinuous hot-dip galvanising), surface cleansing with the ammonia solution Mipa Zinkreiniger:
1. Mix Mipa Zinkreiniger 1 : 1 with water.
2. Wet sand thoroughly with a corundum synthetic non-woven web to a matt finish.
3. Allow the resulting metallic grey suspension to work for approx. 10 minutes.
4. Sand again.
5. Afterwards, rinse thoroughly with water and allow the surface to dry.

GRP:
1. Before painting, reheat the object to be painted for 60 minutes at 60°C.
2. Degrease with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.
3. Sand thoroughly with P 240 - P 320.
4. Clean again with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.
5. Allow parts to dry completely.
6. Recommended for neutralising electrostatic charges:
Blow off the surfaces by means of MP Ionisierungspistole X-ION, cleans and neutralises in one operation, reduces dust inclusions when coating. In addition, this avoids differences in pigment orientation when overcoating with metallic/ effect basecoats.

ATTENTION: Releasing agents must be removed completely! After the previously mentioned preparation, we recommend doing a wetting test with water. If the water drops roll off quickly, repeat the pre-treatment.

Intact, sound old paintworks, factory paintings:
1. Pre-clean with Mipa Silikonentferner.
2. Then sand with P 320.
3. Afterwards, degrease with Mipa Silikonentferner.

Cathodic e-coating / shop primer:
1. Pre-clean with Mipa Silikonentferner.
2. Then sand with MP Softpad Superfine or with P 320.
3. Afterwards, degrease with Mipa Silikonentferner.

Plastic substrates:
1. Before painting, reheat the object to be painted for 60 minutes at 60°C.
2. Degrease with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.
3. Sand thoroughly with MP Softpad Superfine using Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner .
4. Clean again with Mipa Kunststoffreiniger antistatisch or Mipa Silikonentferner.
5. Allow parts to dry completely.
6. Recommended for neutralising electrostatic charges:
Blow off the surfaces by means of MP Ionisierungspistole X-ION that cleans and neutralises in one operation, which reduces dust inclusions when coating. In addition, this avoids differences in pigment orientation when overcoating with metallic/ effect basecoats.

ATTENTION: Releasing agents must be removed completely!

After the previously mentioned preparation, we recommend doing a wetting test with water. If the water drops roll off quickly, repeat the pre-treatment.

Due to the wide range of plastic types and compounds available on the market, preliminary tests on original parts are indispensable.

Wood:
Apply only to perfectly dry, clean and resin-free wooden substrates.
1. Sand wood with P 180 - P 240
2. Remove thoroughly the dust from surfaces or blow them off with oil-free compressed air.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)87 03/922-0 · Fax: +49(0)87 03/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

When used as sanding filler, follow the sanding instructions below after drying:

1. For 1-layer topcoats, sand dry with P 400 or wet with P 600.

2. For 2-layer topcoats, we recommend dry sanding with P 500 / 600 or wet sanding with P 800 / 1000.

3. Thoroughly remove sanding dust using Mipa Silikonentferner or Mipa WBS Reiniger or Mipa WBS Reiniger FINAL. Use clean, lint-free wiping cloths.

It is recommended that the sanded surfaces and/ or joints, grooves etc. are thoroughly blown off with oil-free compressed air.

4. Then clean the surface to be painted with Mipa Silikonentferner, Mipa WBS Reiniger or Mipa WBS Reiniger FINAL using a new, clean cloth.

Once the cleaners have dried completely without leaving streaks, apply the topcoat.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)87 03/922-0 · Fax: +49(0)87 03/922-100 · mipa@mipa-paints.com · www.mipa-paints.com