

Stelpant 2K-PU-Mica UV

Product description

Stelpant 2K-PU-Mica UV is a two component high performance semi-gloss polyurethane topcoat. It is UV-resistant, weatherproof and builds dense and highly resistant films. Depending on the types of pigments selected the surface appearance may be slightly rough.

Recommended use

Stelpant 2K-PU-Mica UV is a topcoat highly resistant against industrial and maritime atmosphere. Suitable for all types of steel structures, industrial- and petrochemical plants, hydraulic- and civil engineering, bridges and offshore facilities. Tested as part of a coating system according to DIN EN ISO 12944-6:2018-06, corrosivity category C5 and for offshore applications according to DIN EN ISO 12944-9:2018-06.

Technical data*

Product:	Stelpant 2K-PU-Mica UV RAL 7038
Colours:	MIO colors according to DB standard, RAL, NCS, special colours on request
Gloss:	semi-gloss (gloss units cannot be measured according to DIN EN ISO 2813:2015-02 due to the roughness of the surface)
Density:	approx. (1.42 +/- 0.05) g/cm ³
Volume solids:	approx. (54.0 +/- 2) %
Theoretical coverage:	approx. 6.8 m ² /l or 4.8 m ² /kg at 80 µm DFT
Recommended DFT:	60 - 80 µm
VOC:	approx. 395 g/l
Thinner:	Stelpant-PU-Thinner (can also be used for cleaning)
Temperature resistance:	max. 120°C (dry heat) or 60°C (wet heat)
Pot life:	approx. 6h (at 20°C)
Mixing ratio:	Comp. I : II = 10 : 1
Storage:	24 month in unopened original packing and stored at a temperature between 5°C and 30°C and protected from direct sunlight

* Data refer to colour RAL 7038 and the mixed product, ready for use. Values are calculated. Other colours may vary

Drying

Drying stage acc. to DIN EN ISO 9117-5:2012-11	20°C	10°C
TG 1	1,0 h	1,5 h
TG 3	4,0 h	6,0 h
TG 6	9,0 h	12,0 h

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The above mentioned drying times have been determined under laboratory conditions. They are related to the temperatures indicated, at a relative humidity of 60% and a dry film thickness of 60 µm. Lower temperatures will extend, higher temperatures will shorten the drying process.

Overcoating: minimal: possible after approx. 8 h
Depending on the condition of the coating it may be necessary to prepare the surface accordingly. If the recoat interval exceeds 6 months please consult our technical department prior to application.

Application conditions

Substrate temperature: from +5°C to +50°C
Luftfeuchtigkeit: up to 80% relative humidity

The surface temperature has to be at least 3°C higher than the ambient dew point.
Surfaces have to be clean and free of salts or substances that could interfere with adhesion, e.g. oils and greases.

Material preparation

The two component coating has to be thoroughly stirred with an electrical or air-driven agitator prior to application. Mixing ratio I : II = 10 : 1. Mixing time not less than 3 min.

Application methods

	Viscosity	Nozzle (recommended)	Pressure (recommended)
Airless spray:	undiluted	0.28 - 0.48 mm	250 - 340 bar
		0.011 - 0.019 inch	3625 - 4930 psi
Brush / Roller:	undiluted		

High pressure air spray is also possible, depending on the viscosity it may be necessary to dilute the material before application.

Processing instructions

Coatings containing micaceous iron ore are best applied by spray to obtain a uniform colour. Touch ups of sprayed surfaces by means of brush or roller can lead to differences in shade.

Only use Stelpant-PU-Thinner to dilute Stelpant products or for cleaning purposes. The use of other thinners is not allowed and can lead to negative properties of the dry film and/or thickening of the coating material.

Coating systems
For structural steel under C5 conditions acc. to DIN EN ISO 12944-6:2018-06
Durability: low

1 x 80 microns STELPANT-PU-ZINC
1 x 80 microns STELPANT 2K-PU-MICA UV

Durability: high

1 x 80 microns STELPANT-PU-ZINC
1 x 80 microns STELPANT-PU-MICA HS
1 x 80 microns STELPANT 2K-PU-MICA UV

Durability: very high

1 x 60 microns STELPANT-PU-ZINC
1 x 180 microns STELPANT-PU-COMBINATION 500
1 x 80 microns STELPANT 2K-PU-MICA UV

Stelpant 2K-PU-Mica UV**For offshore structures acc. to DIN EN ISO 12944-9:2018-06**

1 x 60	microns	STELPANT-PU-ZINC
1 x 140	microns	STELPANT-PU-COMBINATION 500
1 x 80	microns	STELPANT 2K-PU-MICA UV

Suitable for hot dip galvanized steel

1 x 60	microns	STELPANT-PU-MICA HS
1 x 80	microns	STELPANT 2K-PU-MICA UV
or:		
1 x 60	microns	STELPANT-PU-OXIDE
1 x 80	microns	STELPANT 2K-PU-MICA UV

Above systems are to be considered as examples. Other systems are possible depending on the intended use and the required lifecycle.

Important notes**Issue date of Data Sheet:**

01/2022. This data sheet supersedes those previously issued.

Safety precautions:

For professional use only.

For all relevant physical, safety, toxicological and environmental data please refer to the Material Safety Data Sheet, which can be provided on request.

Please observe all relevant regulations regarding storage, transport and application as well as the safety precautions printed on the labels on the can.

Disposal:

All empty cans should be disposed of in accordance with local legislation.

Disclaimer:

All products supplied are subject to our General Sales Conditions.

The information given in this Technical Data Sheet is non-binding and merely indicative, as the products can be used under conditions beyond our control. Above data regarding use, application and consumption are to be considered as guidelines only. The corresponding practical data can only be defined per project.

The information in this Technical Data Sheet is based on laboratory testing and given to the best of our knowledge, according to the results of our research activities and our practical experience. However as the products can be used on different materials, substrates and under different working conditions, it is impossible for us to mention all possible details and therefore we cannot accept liability for any damage, unless willfully intended or caused by gross negligence from our side.