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IGP Powder Coatings

TDS IGP-RAPID®^{top} 381ME-A1|240424|v2.2

This application-related advice is given to the best of our knowledge. However, this information is non-obligatory and does not exempt you from carrying out your own tests. Application, use and processing of these products are beyond our control and are therefore on your responsibility.

Consult the Safety Data Sheet prior to use. Article-specific safety data sheet and comprehensive risk management measures available at: **igp-powder.com**

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Technical data sheet

IGP-RAPID®^{top} 381ME-A1

Matte powder topcoat with a fine texture for two-coat application on temperature-sensitive wood-based materials in interiors.



Characteristics

- Deep matte
- Var. fine texture
- Pearl mica
- Mica
- Indoor quality



Powder properties

Particle size:

Solids:

Density:

Suitability for storage:

< 100 µm

> 99 %

1.3 kg/l-1.6 kg/l

min. 6 months at ≤ 25 °C

min. 9 months at ≤ 15 °C

in an unopened original container

Color tones:

RAL Metallic and individual metallic colors on request



Processing

Pre-treatment

If the surface finish of the MDF ex-works does not meet the quality requirements of the end product, the surface has to be sanded. This will ensure that the material has an evenly smooth surface and is free of any contaminants, minor scratches, dust, grease, etc. For more information, see IGP-TI 111.

Coating devices

All conventional electrostatic systems with corona charging.

For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

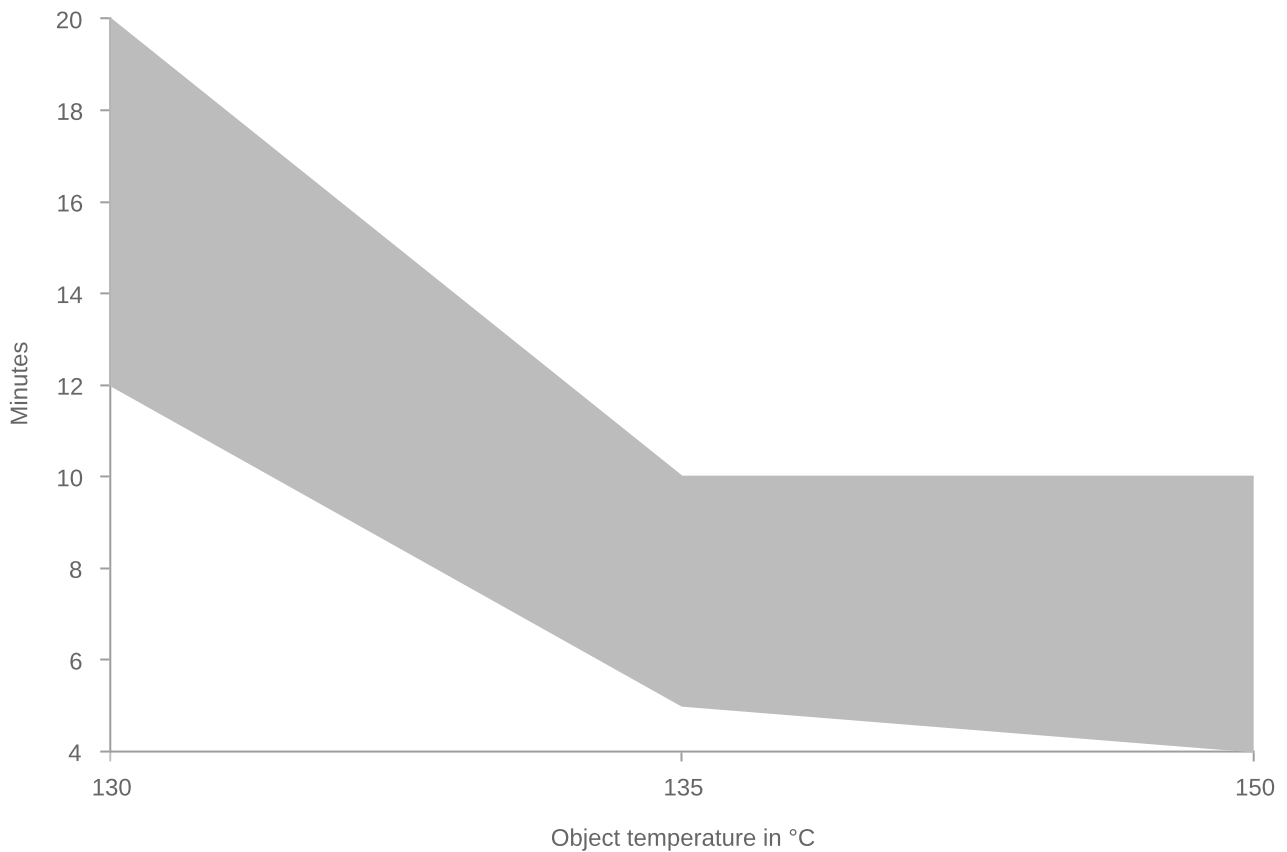
Recommended film thickness

80 µm - 100 µm

A homogeneous coating result with textured coatings or article-and color specific differences in hiding power may require higher coating thicknesses. The corresponding processing guidelines must be observed.

For a pre-calculation of the required powder coating quantity, the necessary coating thickness must be determined for each article.

Curing conditions



T Object	t min	t max
130 °C	12 minutes	20 minutes
135 °C	5 minutes	10 minutes
150 °C	4 minutes	10 minutes

Due to the limited thermal conductivity, the use of infrared- (electric / gas catalytic) or convectional - infrared combined ovens is recommended.

In order to determine ideal curing conditions, we recommend practical trials with the respective object and curing oven.

The curing conditions must be carefully controlled. Powder coatings cured outside the curing window may show deficiencies in the film flexibility. Our technical customer service will advise you.

Reclaimability

Small portions of recovered powder can be added, automatically if possible, to the fresh powder.

Important: Keep overspray to an absolute minimum. Processing instruction VR201.1 must be observed.



Film properties

Tested on

Substrate:

EGGER MBP-L 25mm

Tested setting:

Tested on Primer 13 with a total film thickness > 160µm
Object temperature:
135 °C, 5 min.
Mechanical tests
Hinge Hole Test
≤ 1.1
IGP AA341.54
Chemical tests
Acetone test
1N Level 2
IGP AA341.58
Additional properties
Behavior at chemical influence
B
DIN 68861 - 1 2011-01
Behavior at abrasion
C
DIN 68861 - 2 2020-07
Behaviour at scratches
D
DIN 68861 - 4 2013-02
Behaviour subjection to dry heat
C
DIN 68861-7 1985-04
Behaviour on subjection to wet heat
B
DIN 68861 - 8 2001-04
Lightfastness
> 6
DIN EN 15187 2006-12
Water vapor admission
i.O.
DIN 68930 2009-11
3 cycles: no visible changes
Resistance to alternating climates
i.O.
DIN 68930 2009-11
1 cycle: no visible changes
Resistance to alternating climates
i.O.
AMK-Merkblatt 005 2015-04
Module 3, 10 cycles:
no visible changes
Humidity resistance
i.O.
AMK-Merkblatt 005 2015-04
Module 2, 14 days:
no visible changes



Further information

Packaging

20 kg cardboard box with inserted antistatic PE liner

Protection of coated parts

Coated parts should be packed after cooling with suitable materials without plasticizers. They should be stored protected from the weather to avoid the formation of condensation and thus water spots on the coating.

Cleaning

The coated parts must be cleaned according to the directives RAL-GZ 632 or SZFF 61.01.

Technical Information IGP-TI 106 must also be observed when dealing with pearl mica effects.

Paint removal and disposal

After use, coated goods should be supplied to the normal recycling process. The disposal methods for sludges or residual powders must be observed in accordance with the local official provisions whilst taking Waste Code "080201 Coating Powder Wastes" in accordance with the European Waste Catalogue into consideration.