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IGP Powder Coatings

TDS IGP-HWFclassic 591TC-A8 LivingSurfaces|240424|v2.1

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-HWFclassic 591TC-A8 LivingSurfaces

Super-durable, coarsely ground, unicolored speckled coating powder for vivid plaster-like finishes.



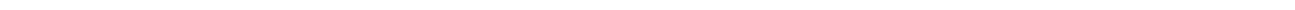
Characteristics

- Deep matte
- Grain texture
- Spotted effect
- Super durable façade quality, 3 years Florida > 50% residual gloss
- more robust & pliable



Material approvals

- Qualicoat Nr. P-1173, class 2





Powder properties

Particle size:

Solids:

Density:

Suitability for storage:

< 39.37 mil

> 99 %

10.85 lb/gal-13.35 lb/gal

min. 24 months at ≤ 77 °F

in an unopened original container

Color tones:

Due to the limited volume of highly weather-resistant pigments, the product portfolio only has a small amount of different shades in accordance with the special IGP color range.



Processing

Pre-treatment

For this product, a substrate-specific pretreatment and corresponding primer application is highly recommended. The results of a single-layer application are the user's sole responsibility.

Aluminum

- Chromating according to DIN EN 12487
- Chrome-free pretreatment according to GSB International and QUALICOAT specifications
- Pre-anodization

Steel

- Zinc phosphating

Galvanized steel

- Zinc phosphating
- Chrome (III) passivation
- Chromating according to DIN EN 12487

The suitability of the pretreatment method used is generally to be tested by the coater in advance with appropriate test methods. The minimum requirement for aluminum substrates / galvanized steel components is to carry out a boiling water test with a subsequent cross-cut adhesion and tape

test. We refer to the guidelines of the GSB International, Qualicoat and Qualisteelcoat certifications. For further information: see also our special leaflet on pre-treatment (IGP-TI 100).

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

3.94 mil - 11.81 mil

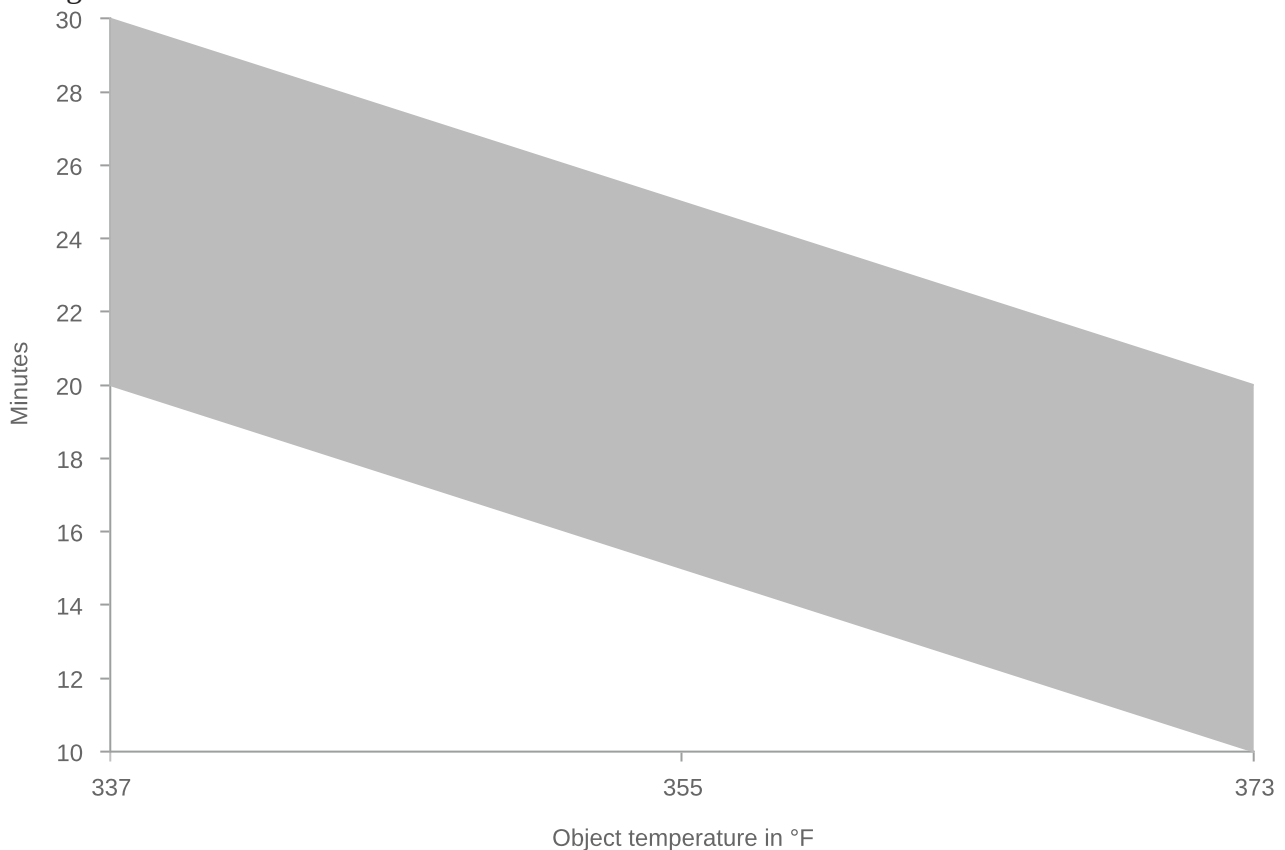
Aluminium substrate:

For the application IGP-HWFclassic 591T...A81 on aluminium, the use of a colour-similar highly weather-resistant fine structure as a primer, either IG-PHWFclassic 591TA...R10 or also 591TC...A11 in a minimum layer thickness of 60 µm is recommended. In this case, the minimum layer thickness of the Top-Coat 591TC...A81 may be less than 130 µm after testing. The processing guideline VR 213 must additionally be observed.

Steel substrate:

For the application of IGP-HWFclassic 591T...A81 on bare steel or galvanised steel, the use of the corrosion protection primer IGP-KORROPRIMER 60 in a minimum layer thickness of 80 µm is mandatory. For the application of IGP-KORROPRIMER 60, please refer to the technical data sheet IGP-KORROPRIMER 60 and additionally the processing guideline VR 213 must be observed.

Curing conditions



T Object	t min	t max
338 °F	20 minutes	30 minutes
356 °F	15 minutes	25 minutes
374 °F	10 minutes	20 minutes

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

Application

Due to the unique particle size distribution the products enable the possibility for stucco surfaces. Application guideline VR213 "IGP -LivingSurfaces" and technical information TI 112 "IGP -LivingSurfaces" must be observed.

Reclaimability

Due to the unique particle size distribution, the product enables the possibility of stucco surfaces. Application guideline VR213 "IGP-LIVINGSURFAVCES" must be observed.



Film properties

Tested on

Substrate:

Aluminum (AlMg1), 0.8 mm chromium-free

Film thickness:

2.36 mil - 3.15 mil

Object temperature:

356 °F, 15 min.

Appearance

Gloss level

1-4 R'/60°

DIN EN ISO 2813 2015-02

Mechanical tests

Cross-cut adhesion test

Gt 0

DIN EN ISO 2409 2020-12

Mandrel bending test / Tape test

≤ 5 mm

DIN EN ISO 1519 2011

Impact test / Tape test

≥ 20 inchp.

ASTM D 2794 1993

Erichsen cupping / Tape Test

≥ 5 mm

DIN EN ISO 1520 2007-11

Buchholz hardness

≥ 80

DIN EN ISO 2815 2003-10

Weathering tests

3 years Florida, 5° south

> 50 % residual gloss

DIN EN ISO 2810 2021-01

Xenon-arc lamps, 1000h, 90%

> 90 % residual gloss

DIN EN ISO 16474-2 2014-03

Corrosion tests

Acetic acid salt spray test, 1000h

No infiltration, no blisters

DIN EN ISO 9227 2017-07

Condensation water test, 1000h
No infiltration, no blisters
DIN EN ISO 6270-2 2018-04
Chemical tests
Mortar resistance
Easily removable after 24h with no residues.
ASTM D 3260 2001



More information

Packaging

20 kg cardboard box with inserted antistatic PE liner

Printing and glueing

Preliminary tests are mandatory for printing and glueing of painted surfaces.

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

see TI115

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.