

## Technical data sheet

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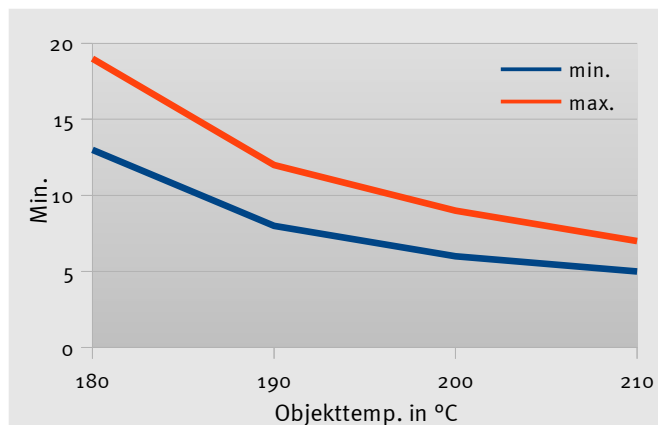
### POLYFLEX® PES-20 smooth texture chemical resistant Corona Silk gloss 60

Silk gloss chemical and solvent resistant hybrid powder for indoor use. Based on polyester and epoxy resins with very good smooth and high elasticity.

<b>Applications</b>	Preferred applications are in the plumbing, air conditioning, food, kitchen and hospital sector, machinery and equipment enclosures, metal furniture, kitchen appliances	
<b>Colours</b>	Practically all colours	
<b>Surface</b>	smooth texture	
<b>Gloss</b>	Silk gloss, 55-65 gloss units (60°)	
<b>Powder properties</b>	<b>Particle size distribution</b>	smaller 29 µm: 55 – 60% smaller 122 µm: 99 – 100%
	(HELOS H1708)	
	<b>Density</b>	1.4 – 1.7 g/cm <sup>3</sup> different depending on the colour can be specified per colour
<b>Material consumption</b>	g/m <sup>2</sup> =	Density (g/cm <sup>3</sup> ) x film thickness (µm)
<b>Coating thickness</b>	Recommended	70 – 90 µm depending on the colour
	Maximum	150 µm
<b>Application</b>	The application can be made with the usual powder coating systems. To avoid any surface disturbances and to maintain the properties of the powder paint, we recommend no to mix it with any other powder paint. Do not bake together with other powder coatings in the same oven.	
<b>Packaging</b>	<ul style="list-style-type: none"> <li>- 20/25 kg cardboard</li> <li>- 500 kg Octobox</li> <li>- 450/500 kg Big Bag</li> </ul> Other packaging variations are available on request.	

#### Baking diagram

**Curing time recommendation: 13 min by 180 °C object temperature**



**Curing conditions:**

210°C	5 min. hold time
200°C	6 min. hold time
190°C	8 min. hold time
180°C	13 min. hold time

## Support

Different metals also as top-coat for example on cathodic anti-corrosion dip-coating. The support to be coated has to be free of oil, grease and oxidation products. Under strain we recommend following pretreatments:

**Aluminium** Apply a yellow, green or transparent chroming, an equivalent chrome free pretreatment or a thin layer of preanodisation.

**Steel/Iron** Apply at least a metal- or even better a zinc-phosphate coating

The pretreatment can be applied by dip-coating or spray method.

## Physical properties

tested on:

steel sheet 0.8mm ST1405  
double-pickled V1094

Film thickness  
70 – 90 µm

**Cross cut test** GT 0  
(DIN ISO 2409)

**Mandrel bending test** < 5 mm  
(DIN ISO 1519)

**Impact resistance** front > 10 Nm (~88 inchpound)  
ASTM D 2794 reverse > 5 Nm (~44 inchpound)

**Erichsen cupping** > 5 mm  
(DIN ISO 1520)

**Buchholz hardness** > 100  
(DIN ISO 2815)

## Resistances

tested on:

iron phosphate steel sheet

**Condensation water test** 500 h no bubble building  
DIN ISO 6270 Infiltration on the scratch track under 1 mm

**Salt spray test** 240 h no bubble building  
DIN ISO 9227 Infiltration on the scratch track under 1 mm

## Post treatment of coated parts

To print, to paste, to label, to laminate of film and any other post-treatment, some preliminary testing is recommended. For packaging only use appropriate unplasticized materials. Perspiration water should be avoided.

## Reparis

For repairs (conveyors hangers touch ups) the repair kit, Art No 12155 is available.

## Storage

**Storage instruction** in the original containers, store in a cool and dry environment  
max. 25°C No direct sun exposure

**Shelf life** 18 months from the date under the conditions mentioned

## Safety recommendations

**under explosion limit** 40 g/m<sup>3</sup>

Further information are to find in the safety data sheet and the CEPE booklet "Safe powder coating" and "Results of the experimental toxicology study on thermosetting powder coatings".

Comments:

The information on this technical data sheet about the properties and application of the product in question are made on hand of our knowledge, development and practical experience. Because of the multiple possible application, it is impossible for us to present them all in detail. Our technical consultants are at your disposal for any question you might have. Further more, our general sales and delivery conditions apply. This technical data sheet is revised periodically. If necessary, our sales department will confirm the validity of this document



KARL BUBENHOFER AG, Hirschenstrasse 26, CH-9201 Gossau SG  
Tel. +41 (0)71 387 41 41, Fax +41 (0)71 387 43 05, [www.kabe-farben.ch](http://www.kabe-farben.ch)