



## N-PE-SD SERIES

# POLYESTER SUPERDURABLE

- superior weather resistance
- excellent color and gloss stability
- good mechanical properties

## APPLICATION

Window frames, facade elements, agriculture machines, car elements, garden furniture and any metal object where very high sun rays and weather resistances are required, also in tropical environments.

The N-Pe-Sd series are Super Durable TGIC-free pure polyester systems providing outstanding resistance to UV radiation and outdoor weathering. Approved Qualicoat class 2, these powder coatings are ideally suitable for the Architectural, ACE (Agricultural and Construction Equipment) and Automotive sectors.

## PROPERTIES

<b>Colour shade:</b>	all RAL, (on request NCS, Pantone or other)
<b>Finish:</b>	smooth
<b>Gloss:</b>	glossy and matt
<b>Density:</b>	from 1.25 to 1.80 g/cm <sup>3</sup> , depending on colour shade and quality
<b>Yield:</b>	depends on the applied film thickness, c.f. formula
<b>Storage life:</b>	average of 36 Months at temperatures lower than 30 °C

# POLYESTER SUPERDURABLE

## COATING PROPERTIES

<b>Adhesion test:</b>	Gt 0 DIN 53151
<b>Impact test:</b>	>25 cm/Kg ASTM D 2794
<b>Erichsen cupping test:</b>	>5 mm ISO 1520
<b>Mandrel bend test:</b>	5 mm ISO 1519
<b>Pencil hardness test:</b>	H-2H ASTM D 3363
<b>Salt spray test:</b>	1,000 hours 0.5 mm ASTM B 117-94
<b>Humidity resistance:</b>	1,000 hours unaffected ASTM 9870
<b>Accelerated ageing test:</b>	1,000 hours, <10% gloss loss according Qualicoat
<b>Florida test:</b>	12 month, <10% gloss loss according Qualicoat Specification Class 2 ISO 2810
<b>Chemical resistance:</b>	good regarding lyes and acids diluted and at room temp.

## PROCESSING

### Surface pretreatment:

Before coating, metal surfaces must be clean and free from greases, oils, rust and any other material that might cause adhesion loss of the product to surfaces.

Aluminium: chromatising or Cr-free cycles

Galvanised steel: chromatising

Steel: sand blasting or/and iron or zinc phosphatising

### Application:

all common processes (Tribo, Corona)

### Thickness:

From 60 µm to 120 µm, depending on colour shade and finish type

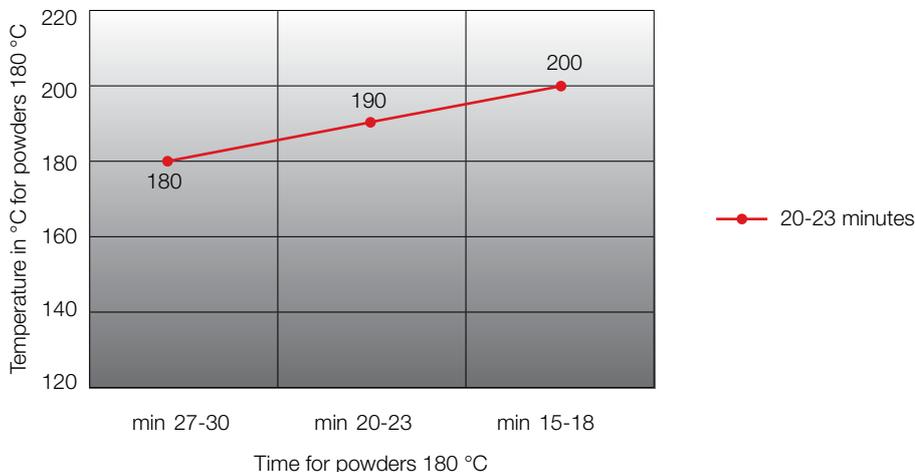
### Curing conditions:

N191...(glossy): 15/18 minutes at 190°C object temp.

N161...(matt): 20/23 minutes at 180°C object temp.

## CURING CONDITIONS

### POLYESTER SUPERDURABLE – Curing conditions



Light colour shades can cause a shift. The maximum temperature is around 210 °C. All data refer to object temperature.

## THEORETICAL SPREADING RATE

Multiply the average specific gravity by the requested thickness in microns. The obtained value is the consumption in grams per square meter. Formula: Specific gravity x thickness = yield (g/m<sup>2</sup>)

These data are based on empirical values for the completeness of which we do not assume any guarantee. Since we cannot influence in any way the processing of the product, the purchaser is responsible for ensuring that the product is suitable for the intended purpose before using the product. Any change in the processing procedure, environmental conditions, or the non-observance of instructions can influence the result negatively. Status 07/2015.