N-PE-SD SERIES

POLYESTER SUPERDURABLE

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

The N-Pe-Sd series are Super Durable TGIC-free pure polyester systems providing outstanding resiststance 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.

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.

PROPERTIES

Colour shade:	all RAL, (on request NCS, Pantone or other)
Finish:	smooth
Gloss:	glossy and matt
Density:	from 1.25 to 1.80 g/cm³, depending on colour shade and quality
Yield:	depends on the applied film thickness, c.f. formula
Storage life:	average of 36 Months at temperatures lower than 30 °C

KANSAI HELIOS

POLYESTER SUPERDURABLE

COATING PROPERTIES

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

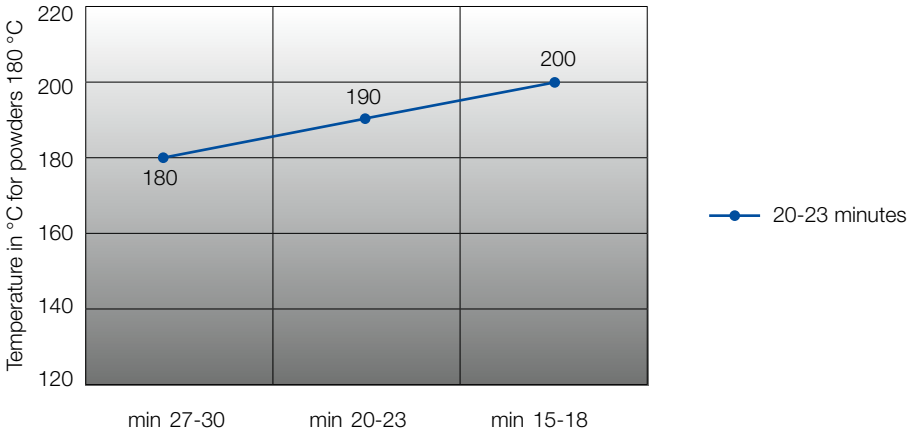
From 60 µm to 120 µm, depending on colour shade and finish type

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



Time for powders 180 °C

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/m²)

KANSAI HELIOS Italy S.r.l. – Socio unico, Via del Lavoro, 14-16, 31039 Riese Pio X (TV), Italy
info@kansai-helios.it | www.kansai-helios.it | **Part of KANSAI PAINT.**