

# Polisint KPE 20 ENG

PE thermoplastic blend for electrostatic and electrokinetic spray coating.

Polisint® thermoplastic powder is based on a modified polyethylene and is specially developed to provide long-term, protective surface layer of iron, galvanized steel and aluminum both for the interior and the exterior applications.

Polisint® is resistant to mechanical damage, stress cracking, adverse weather conditions, detergents, chemicals, acids, solutions, salts and air pollutants in the air. The surface has excellent adhesion to metal. The resulting surface also provides very good abrasion and impact resistance.

Powder coverage	5,23 m2/kg at 200 µm
Particle size	90% less than 200 $\mu m$
Density	0,93 g/cm3
MFI 190 °C, 2,16 kg	4 - 8 g/10′
Fluidity	low
Melting point	109 °C

#### Product specification sheet KPE 20

#### Typical coating characteristics

Cured film thickness	120-250 micron
Impact force (ASTM D 2794-93)	> 10 J
Adhesion (ASTM D 3359-93A)	A1
Abrasion resistance Taber CS10 500g 500c	4 mg
Salt bath - 1000 hours - cut with steel	loss of film adhesion less than 10 mm from the cut

# How to Use

## Pretreatment:

The steel surface must be cleaned of grease and other impurities with technical petrol. For better adhesion of the material is recommended to slightly roughen the surface.

## **Coating:**

Application by electrostatic and electrokinetic spray guns:

Applying with electrostatic (KORONA) gun requires negative polarity. Powder can be also sprayed with electrokinetic (TRIBO) guns. Recommended setting is 30-50 kV or 10-20 µA. After coating, the product must be heated up in oven at 190-220° C for 10-20 minutes depending on the thickness of the applied powder. Recommended thickness 250-300 microns.

Recommended film thickness		300 - 1000 μm
Gloss	ISO 2813	70
Neutral Salt Spray test	ISO 7253	after 1000 hours
	cross-sectioned surface (X)	loss of film adhesion less than 10 mm from the cut corrosion under layer of 2-3 mm
	undamaged surface	no adhesion loss no signs of corrosion
Chemical resistance	- acids and alkali - salts /except peroxide/ - solutions 60 °C	good good good
Adhesion		excellent

### **Cured film properties**

#### Quality guarantee:

The whole production process is carried out under strict quality control standard per ISO 9001:2000.

# **Application Method**

Polyethylene powder designed for metal coating by electrostatic or electrokinetic spraying.

The recommended spray guns are electrostatic (Korona) or electrokinetic (Tribo).