

Product Datasheet



Functional Powder Coatings

AkzoNobel

Tomorrow's Answers Today

Resicoat® Corvel 10-6051 Green
FBE – Interior Pipe Coating
Code: HKH12QF

Product Description

Resicoat® Corvel 10-6051 Green (HKH12QF) is a melt-mixed, 100% solids modified epoxy thermosetting ID pipe coating powder designed for use at elevated temperatures and pressures in drill pipe, production tubing, valves, and fittings. It is a tough, flexible coating which will resist damage and cracking during handling and coupling operations. When applied over Resicoat® Corvel EP-10 primer (1P-0010), 10-6051 is also resistant to H₂S, CO₂, CH₄ and petroleum distillates.

Powder Properties

	Test Method	Results
Specific Gravity	Calculated	1.71
Particle Size - Alpine Jet Sieve	ASTM D 3451 (% retained)	+70 Mesh: 3% Max +140 Mesh: 15 - 30% +325 Mesh: 50 - 65%

Application Properties

Preheat	20 min at 320°F (160°C)
Post-cure	30 min at 425°F (218°C)
Film Thickness	8.0-12.0 mils (200-375μ)
Storage Stability	6 Months from date of delivery when stored in dry conditions at <70°F (<21.1°C)

Material properties

Direct Impact Resistance	ASTM D 2794 (5/8" indenter)	100 in lbs
Flexibility	4 Point Bend @ 75°F (23.9°C)	Pass 3°/PD
Edge Coverage	MPTM, Method B: Preheat 15 mins at 320°F Dip Cycle 2 secs Post-heat 15 mins at 425°F	30% at 8.0-15.0 mils
Salt Spray Resistance	ASTM B117, X-Scribe	≤ 1/8" undercut at 1700+ hrs
Adhesion Shear	ASTM D1002	>4000 psi
Elongation	ASTM D2370 10-15 mils on steel dogbone 10-15 mils on free film	11% 2.4%
Hardness	Shore D	>90
Tensile Strength	ASTM D2370	> 7,500 psi
Water Immersion	Room Temp, 24h	< 0.30% wt. gain
Hot Water Immersion	190°F, 120 days	No blisters, good adhesion



**Material
Properties**

Dielectric Strength

ASTM D149

In Oil at 10-15 mils (250-375 μ)

In Air at 10-15 mils (250-375 μ)

> 1000 volts/mil

> 600 volts/mil

Taber Abrasion Resistance

ASTM D1044

CS-10, 1000g, 5000 cycles

CS-17, 1000g, 5000 cycles

< 100mg

< 140mg

Disclaimer: This Product Data Sheet is based on the present state of our knowledge and on current laws. The data referring to Powder Properties, Application Data and Physical Tests is based on lab based samples. Factors such as quality or condition of the substrate may have an effect on the use and application of the product. It remains the responsibility of the user to test thoroughly if the product is applicable for the intended use. The use of the product beyond our recommendation releases us from our responsibility, unless we have recommended the specific use in writing. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. We are not liable for any application-technological advice. The Product Data Sheet shall be updated from time to time. Please ensure you have the latest version before using the product. All products and Product Data Sheets are subject to our standard terms and conditions of sale (GCS). You can receive the latest copy of GCS via internet or our post address. Brand names mentioned in this Product Data Sheet are trademarks of or are licensed to the AkzoNobel group.