

ATRESIN 3591

Powder Polyester Resin HAA cure

Specification:

Property	Range	Method / According to standard
Acid value	46 - 52 mg KOH/g	AA HL 10 01-0
Tg	54 - 60 °C	AA HL 10 03-1
Viscosity, 150 °C	45 - 60 Pa·s	AA HL 10-07-1

Characteristics and Use:

- » Developed for crosslinking with β -HAA in ratio 97:3.
- » For achieving matt powder coatings Atresin 3541 can be used as combination partner for dryblend mixtures with powder coatings based on Atresin 3541.
- » Ratio of components is 50:50 with good weather resistance.

Delivery form:

Granules with a maximum particle size of 12 mm.

Storage:

The resin should be stored indoors in its original, unopened and undamaged container in a dry place at storage temperatures between -20 °C and 30 °C, for up to 12 months. Protect from freezing and avoid exposure to direct sunlight.

Based on the experience the shelf life of the resin is minimal 5 years. It is recommended to check the acid value and the viscosity every year.

Starting Point Formulation

Component	Mass %
Atresin 3591	63.22
Primid	4.76
Flow agent	1.01
Benzoin	0.2
PA-Wax	1.52
Titan dioxide	29.29

Manufacturing and application method:

- » Extruder: Buss-Ko-Kneter.
- » Casing setting temperature: 105 °C.
- » ESB-spray gun, Corona, voltage: 80 kV.
- » 0,75 mm steel panel, pretreated with zinc phosphate, aprox. 60 - 70 µm coating thickness.
- » Stoving in an air circulated oven - Heraeus UT 6120.

Stoving cycles:

10 minutes at 180 °C (object temperature)

Film properties:

Property	Value	Method / According to standard
Gloss at 60°	≥ 75	DIN EN ISO 2813
Reverse impact	≥ 60	ASTM D 2794
Cupping test (Erichsen)	≥ 8 mm	DIN 53156 / ISO 1520

Other properties:

Dry-blend Mixtures in ratio 50:50 with Atresin 3541 results in powder coatings with gloss at 60 °C about 20 - 30.

Disclaimer

This data is based on experience, for its completeness, we assume no liability. As we take no influence on the processing, it lies within the obligation of the customer to test, whether it is suitable for the intended purpose, before using the product. Any change in the processing procedure, the environmental conditions or the failure to comply with instructions may unfavorably influence the result. This Technical Datasheet is available on our website at www.helios.si. Should there be any discrepancies between this document and the version that appears on the website, then the version on the Website will take precedence.

TECHNICAL DATASHEET

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