

General Description

UVECOAT® 3005 is an amorphous unsaturated polyester resin for use in UV curable powder coatings. The resin has been developed for applications on wood substrates such as textured coatings on MDF and clear varnishes for natural hardwood. Coatings based on UVECOAT® 3005 exhibit excellent scratch resistance.

UVECOAT® 3005 belongs to the ECOWISE™ CHOICE product range for selected applications. (Contact your allnex representative for more information).

Unsaturated (Meth) Acrylated Polyester Resin

Product Specification

	Limits
Appearance	Pale granules
Brookfield Viscosity @ 200 °C, mPa.s	3000-5000
Color, b-value	Max. 10
Acid value (mg KOH/g)	Max. 10

Other Properties

	Typical value
Glass transition (°C)	Approx. 48

Starting Formulation

Component	Weight (%)
UVECOAT® 3005	90.2
Photoinitiators	2.5
ADDITOL® P 891	7.0
Degassing agent	0.3

Extrusion & Application Conditions

Extrusion	
Extruder	Twin screw
Speed	300 rpm
Torque	55 ± 5 %
Temperature	95 to 105 °C
Application	
Application	60 micrometer film on Al panel
Spray Gun	Output voltage: 60-70 kV Belt speed: 0.5-5 m/min
IR-UV oven	IR: 32 KW/m ² UV: 80-160 W/cm

Film Properties

Test	Result
Reverse impact on Al (kg cm or in-lbs)	80
Reverse impact on steel (kg cm or in-lbs)	160

Shelf Life

Under normal storage conditions (≤25°C), the shelf life of the resin will be 12 months from date of manufacturing. For product older than 12 months, it is recommended to check the acid value and the viscosity every year.

Safety & Environmental Protection

For more information, please refer to the Material Safety Data Sheet.

October 2021 – Supersedes previous versions