LEO® Crestapol® 1261

Crestapol®
Urethane Acrylate Technology

Technical Data Sheet

INTRODUCTION

LEO® Crestapol® 1261 is a modified version of Crestapol® 1260 with an extended open/ worktime. It is a low viscosity urethane acrylate type resin which is suitable for infusion, Resin Transfer Moulding (RTM) and similar processes at room temperature, and can be infused at vacuum levels down to -1.0 Bar. LEO® Crestapol 1261 produces laminates with high strength and toughness with exceptional water and hydrolysis resistance.

KEY FEATURES OF LEO® CRESTAPOL® 1261

- **Excellent mechanical performance** and durability using only moderate temperature post-curing cycles
- **High temperature performance** - HDT 109°C/ 228°F and Tg 112°C/ 234°F
- **Compatible with carbon fibre reinforcement materials and general purpose sizing agents**
- **Ability to vary cycle time** eliminates the need to stock different resin grades
- Standard 60 minute gel time but **also available in 30 minute gel time**

FORMULATION

LEO® Crestapol® 1261 should be allowed to attain workshop temperature before use. For curing at room temperature LEO® Crestapol® 1261 requires the addition of a catalyst and an accelerator.

N.B. Catalysts and accelerators should not be mixed directly together, since they react with explosive violence.

The recommended catalyst for curing at room temperature is Cumyl Hydroperoxide, which should be added at 2% into the resin and thoroughly dispersed. The recommended accelerator is 1% solution of cobalt in styrene, which should be added at 2% into the resin and thoroughly dispersed.

POST CURING

Satisfactory laminates for many applications can be made using LEO® Crestapol® 1261 by curing at workshop temperature. For high temperature post cure, temperatures of over 80°C will be required to reach full cure. If you have any further questions contact a member of the Scott Bader tech service team.

PHYSICAL DATA – UNCURED

The following tables give typical properties of LEO® Crestapol® 1261 when tested in accordance with BS2782.

Property	Unit	LEO® Crestapol® 1261
Appearance	-	Clear yellowish brown resin
Viscosity at 25°C 4500 sec^{-1}	Poise	2.25
Density at 25°C	gcm^{-3}	1.038 - 1.042
Stability from date of manufacture when stored in accordance with storage recommendations	Months	12
Working time*	Mins	40 - 50

*at 20°C 2% of 1% solution cobalt in styrene, 2% Cumyl Hydroperoxide. Curing Schedule - 24 hrs at 20°C, 3 hrs at 80°C.

PHYSICAL DATA - CURED: PURE CAST RESIN SHEET

Property	Unit	LEO® Crestapol® 1261
Barcoal hardness	-	55
HDT	°C/ °F	109/228
Tensile strength*	MPa	76
Tensile modulus*	GPa	3.6
Elongation at break*	%	2.7
CTE - Alpha 1	ppm $(°C)^{-1}$	65
CTE - Alpha 2	ppm $(°C)^{-1}$	200
Tg - TMA	°C °F	100 (onset), 112 (Tg) and 125 (exit) 212 (onset), 234 (Tg) and 257 (exit)

*at 20°C 2% of 1% solution cobalt in styrene, 2% Cumyl Hydroperoxide. Curing Schedule - 24 hrs at 20ºC, 3 hrs at 80ºC.

STORAGE

LEO® Crestapol® 1261 should be stored between 5°C and 25°C in the original, unopened container in a dry, well ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. If stored outside of these recommendations, shelf life will be significantly reduced.

PACKAGING

LEO® Crestapol® 1261 is supplied in 25kg (6.6 gallon), 200kg (53 gallon) and 1000kg (264 gallon) containers.

HEALTH & SAFETY

Please see separate Material Safety Data Sheet.

SCOTT BADER

Making a positive difference

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