NANOLEDGE

Innovium TOOL : Tool manufacturing applications

Low viscosity systems

Product	Process	Viscosity (mPa.s)	Gel time (min) on 100g @ 25°C	Recommended cure	Tg °C (°F)	Hardness (shore D)	Comments
AKD 8665	Infusion	500	420	24h @ Room temperature + 7h @ 122°F (50°C) + 3h @ 194°F (90°C) + 3h @ 248°F (120°C) + 3h @ 302°F (150°C)	365 (185)	90	Longer gel times available upon request
AKD 8666	Infusion	500	480		374 (190)	92	

Semi-solid epoxy resin films

Product	Process	Viscosity @ 60°C (mPa.s)	GiC* (J/m²)	Recommended cure	Tg °F° (C)	Storage modulus* kPSI (GPa)	Film density (g/sqm)	Film thickness (µm)	Comments
LEO 8376	Preimpregnation, RFI	160 000	430	2h @ 266°F (130°C) + 2h @ 392°F (200°C)	320 (160)	7250 (50)	40 - 400	35 - 350	Semi solid resin films are designed for a simple implementation in common production lines to produce prepreg. On-the-shelf formulation are low tack versions. Tack may be adjusted on-demand.
LEO 8377	Preimpregnation, RFI	260 000	630		320 (160)	6800 (47)	40 - 400	35 - 350	
LEO 8378	Preimpregnation, RFI	350 000	880		320 (160)	6400 (44)	40 - 400	35 - 350	

Hotmelt systems

Product	Process	Viscosity @ 60°C (mPa.s)	GiC* (J/m²)	Recommended cure	Tg °C (°F)	Storage modulus* kPSI (GPa)	Comments
AKD 8376	Preimpregnation	160 000	430	2h @ 266°F (130°C) + 2h @ 392°F (200°C)	320 (160)	7250 (50)	On-the-shelf formulation are low tack versions. Tack may be adjusted on-demand.
AKD 8377	Preimpregnation	260 000	630		320 (160)	6800 (47)	
AKD 8378	Preimpregnation	350 000	880		320 (160)	6400 (44)	

*** Values determined on carbon based fibre composite (8 layers) cured in autoclave**