SolvaLite® 714

SolvaLite 714 is a rapid-cure epoxy resin prepreg for automotive and industrial applications, designed to enable high-volume press cure manufacturing.

Features and Benefits

- Fast curing: 10 minutes at 150°C at 21-41 bar (300-600 psi)
- 12 months storage at -18°C (0°F)
- 30 days storage at 21°C (70°F)
- Controlled flow
- Toughened formulation
- Excellent cured surface finish
- Multiple product forms
- Syensqo Double Diaphragm Forming Technology™ compatible
- High thermal performance: DMA (E' onset) Tg of 165°C (dry), 115°C (wet) following 10 minutes at 150°C cure

RECOMMENDED CURE CYCLE

Pressure	21-41 bar (300-600 psi)
Ramp rate	Load blank straight into heated tool, applying full pressure after 55 seconds 'dwell'
Recommended cure cycle	10 minutes at 150°C (including the low pressure 'dwell')
Cool down	Parts may be removed from a hot compression mould tool without cooling

PHYSICAL PROPERTIES

Colour	Lightly pigmented black
Resin density	1.2 g/cm³
Glass transition temperature (dry)	165°C by DMA E' onset, following 10 minutes cure at 150°C
Glass transition temperature (wet)	115°C by DMA E' onset, following 10 minutes cure at 150°C after 14 days water immersion at 70°C

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PREPREG

PRODUCT FORM AVAILABILITY

Fibre	Product Form	FAW	Resin Content	Nominal cured ply thickness
50K HS Carbon	Unidirectional tape	200 gsm	36%	0.20 mm
3K SM Carbon	2x2T (VQ)	245 gsm	40%	0.27 mm
12K HS Carbon	2x2T	400 gsm	38%	0.43 mm

STORAGE

Storage life is 365 days minimum from date of manufacture, stored at -18°C or below, in a sealed container; handling life is 30 days minimum if stored at 21°C.

NOTE

Tg data is not applicable for U.S. export control classification or licensing. For export-related information please contact Syensqo.

EXOTHERM

SolvaLite 714 prepregs are reactive formulations which can undergo severe exothermic heat up during the initial curing process if incorrect curing procedures are followed.
Great care must be taken to ensure that safe heating rates, dwell temperatures and lay-up/bagging procedures are adhered to, especially when moulding solid laminates in excess of 10mm (0.4in) thickness. The risk of exotherm increases with lay-up thickness and increasing cure temperature. It is strongly recommended that trials, representative of all the relevant circumstances, are carried out by the user to allow a safe cure cycle to be specified.
It is also important to recognise that the model or tool material and its thermal mass, combined with the insulating effect of breather/bagging materials can affect the risk of exotherm in particular cases.

HEALTH & SAFETY

Please refer to the product SDS for safe handling, personal protective equipment recommendations and disposal considerations.