



TECHNICAL DATA SHEET

SK2TM200-3

Epoxy system for tool infusion

► DESCRIPTION

Epoxy system is used for production of composite tooling and structures by the usual impregnation methods like infusion or wet-lay-up. Low viscosity and long pot life allows infusion of thicker and more complex laminates. Composite tools have faster heat up and cool down rates for reduced production costs, and could be used up to 200°C. The system provides good wetting of reinforcements and fast impregnation.

This product is used in various manufacturing processes of parts made of composite materials.

► TECHNICAL DATA

Material type:

Epoxy

PHYSICAL PROPERTIES			
Composition	Part A	Part B	Mixed
Mix ratio by weight	100	50	
Mix ratio by volume at 25°C	100	63	
Aspect	liquid	liquid	liquid
Colour	amber	colourless	amber
Viscosity at 25°C (mPa.s)	1 600	100	550
Density at 25 °C (g/cm ³)	1.20	0.95	-
Density of cured product at 23 °C	-	-	1.15
Pot life at 25°C on 500 g (min)	-	-	400
Time required to reach 1000 mPa.s on 500 g at 25°C (min)			230

MECHANICAL PROPERTIES at 23°C			
Tensile modulus of elasticity	ISO 527: 1993	MPa	4600
Tensile strength	ISO 527: 1993	MPa	26
Elongation at break	ISO 527: 1993	%	1,0



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Flexural modulus	ISO 178:2001	MPa	2900
Flexural strength	ISO 178:2001	MPa	73

THERMAL AND SPECIFIC PROPERTIES			
Glass temperature transition (Tg)	ISO 11359-2:1999	°C	225
Thermal expansion coefficient (CTE) (+30°C to +180°C)	ISO 11359-2:1999	10 ⁻⁶ K ⁻¹	67

► SIZE

Packing	Part A	Part B
Kit	19 kg	19 kg
Kit	37 kg	19 kg
Kit	190 kg	190kg

► STORAGE

Both parts have to be stored safe from moisture and in their unopened container of origin. Opened containers must carefully be closed safe from moisture under inert and dry gas cover (dry air, nitrogen, etc.)

Shelf life for Part A 3 months at T°C between 15°C and 25°C
 12 months at T°C under -18°C

Shelf life for Part B 12 months at T°C between 15°C and 35°C

The shelf life of Part A is above 3 months in the case of storage at temperature below +15°C.

► CURE CYCLE

After mixing according to the indicated ratio carry out impregnation of the reinforcements. It is recommended to use the temperature above +15°C for an optimal utilisation ensuring a good impregnation. We recommend to degas the mixed solution. Then cure 24 hours at 40°C.



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► POST CURING

In order to avoid any risk of distortion or tooling shrinkage a precise curing cycle is to be observed. Reminder: demoulding takes place only after a 24 hours pre-curing at 40°C. A conformer is recommended for complex shapes.

Then the following thermal treatment can be carried out:

2 hours at 120°C

3 hours at 180°C

An increase and a decrease in temperature should be by 20°C per hour between stages.

► NOTE

Resin is ideal for the infusion of moulds larger than 5 meters.

The product does not self-combust in bulk.

Initial viscosity is stable for 24 hours.