



Si Preg 2K cold in situ preg

Description :

2 components epoxy matrix
Solvent and reactive diluants free
Before mixing, the components are stable during storage (at least 1 year)
Fabric impregnation and tack evolution at ambient temperature
Curing temperature : from 80 to 150 °C

Hardeners :

| | Reactivity | Flow |
|----------|-------------------|-------------|
| KTA 21 : | Slow | Very good |
| KTA 22 : | Standard | Reduced |

Application :

Preimpregnation by hand or machine, filament winding, adhesive
Large parts, hot press moulding

Epoxy resin SR 121 :

| | | |
|------------------------------|------------------------------------|---------------|
| Appearance | Viscous liquid | |
| Chemical nature | Bisphenol / epichlorhydrine resins | |
| Storage | Crystallisation free | |
| Solid content | 100 % | |
| Colour | Yellow, Gardner < 3 | |
| Density (Kg/l) | @ 20 °C | 1.176 ± 0.004 |
| Brookfield viscosity (m.Pas) | @ 20 °C | 7 500 ± 500 |
| | @ 25 °C | 4 300 ± 500 |

Base Hardeners KTA 2x :

| | KTA 21 | KTA 22 |
|---|--|----------|
| Aspect | Viscous liquid | |
| Colour | White | |
| Reactivity type | Slow | Standard |
| Solid content | 100 % | |
| | 100 % | |
| Storage | Chemically stable (>1 year) Decant during storage | |
| Viscosity | Paste | |
| Density (g/cm ³ ± 0.005) @ 20 °C | 1.143 | 1.113 |



Mixing ratio :

| | SR 121 / KTA 21 | SR 121 / KTA 22 |
|-----------|------------------|------------------|
| By weight | 100 g / 21 g | 100 g / 22 g |
| By Volume | 100 ml / 21.6 ml | 100 ml / 23.2 ml |

Tack evolution:

SR 121 / KTA 21 : Let @ 30°C during one day or 12 hours @ 40 °C
SR 121 / KTA 22 : Let @ 20 - 25°C during one day

Gel time / Dry to touch* :

| Temperature | SR 121 / KTA 21 | | SR 121 / KTA 22 | |
|-------------|-----------------|--------------|-----------------|--------------|
| | Gel time | Dry to touch | Gel time | Dry to touch |
| 150 °C | 1' 23'' | 1' 53'' | 50'' | 1' 23'' |
| 130 °C | 3' | 4' 30'' | 2' 20'' | 3' 50'' |
| 120 °C | 5' 40'' | 8' 40'' | 3' 50'' | 5' 20'' |
| 110 °C | 11' | 20' | 6' 30'' | 14' |
| 100 °C | 20' | 38' | 7' 10'' | 21' |
| 90 °C | 36' | 1 h 37' | 19' | 54' |
| 80 °C | 1 h 20' | 3 h 10' | 40' | 1 h 45' |

* after maturation, blend SR 121 / KTA 2x put immediately @ temperature

Curing*:

| Temperature | SR 121 / KTA 21 | SR 121 / KTA 22 |
|-------------|-----------------|-----------------|
| @ 80 °C | 24 hours | 24 hours |
| @ 90 °C | 8 hours | 8 hours |
| @ 100 °C | 4 hours | 4 hours |
| @ 110 °C | 2 hours | 2 hours |
| @ 120 °C | 1 hour | 1 hour |
| @ 130 °C | 15' | 12' |
| @ 150 °C | 8' | 7' |

* after maturation, blend SR 121 / KTA 2x put immediatly @ temperature

Shelf life:

- SR 121 : 2 years @ 20-25°C in closed drum
- KTA 2x : 1 year @ 20-25°C in closed drum. Decantation after long storage
- SR 121 / KTA 21 : More than a month @ 25°C
- SR 121 / KTA 22 : 8 days @ 25°C

Caution:

- KTA 2x decant during storage. Stir carefully before use.
- KTA 2x contain amines, react with atmospheric humidity and carbon dioxide.
Keep the drum closed when unused.

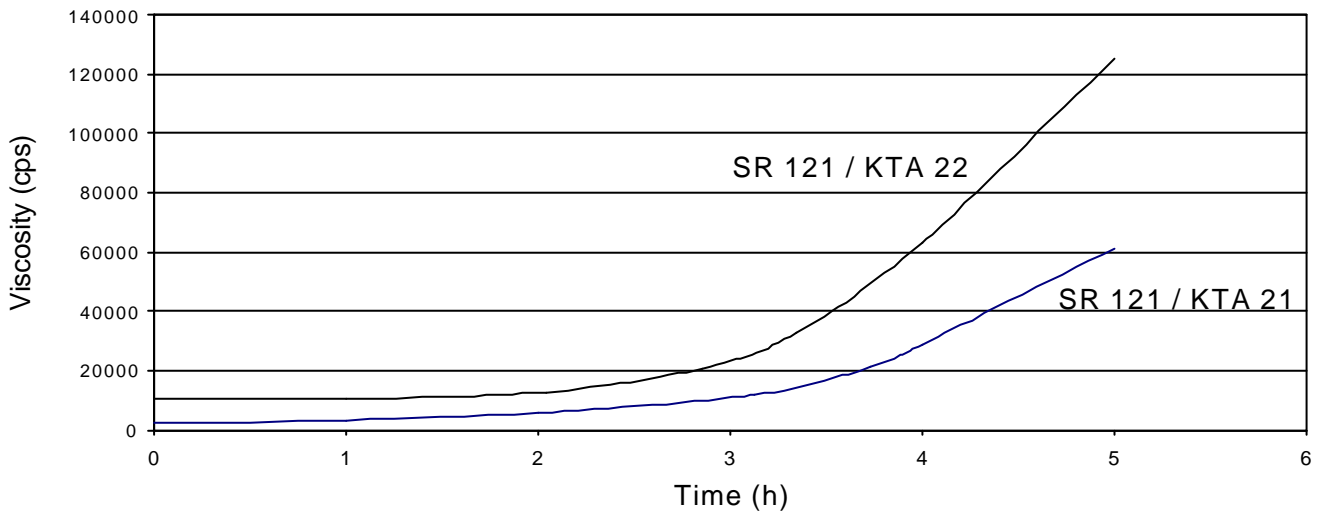
Safety data:

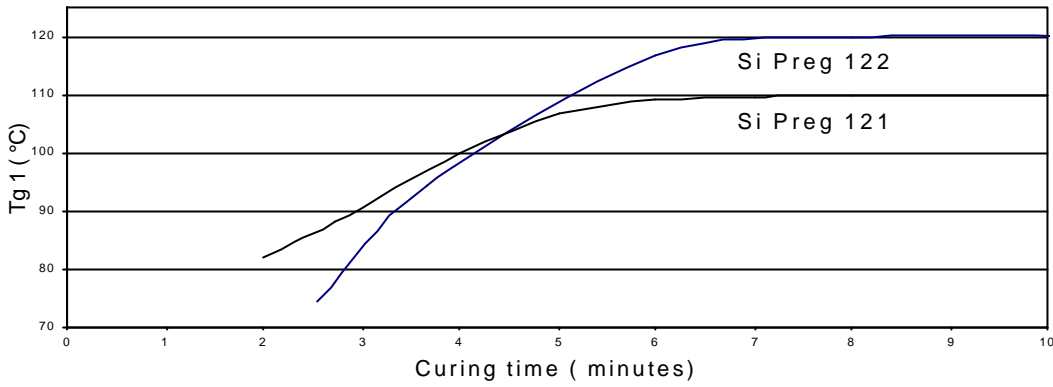
| Products | Symbol | | Risk phrases |
|----------|--------|--|---|
| SR 121 | | Xi: Irritating N: Dangerous for the environment | R 36/38 R 51/53 R 43 |
| KTA 2x | | C: Corrosive N :Dangerous for the environment | R 21 / 22 R 40 R 48 / 22 R 50 / 53 |

Packaging (Kg) :

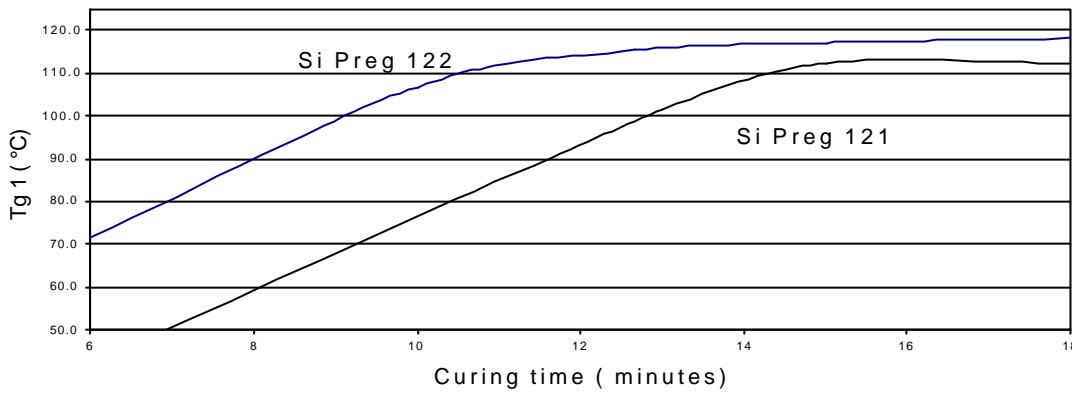
| | | | | |
|--------|------|------|----------|--------|
| SR 121 | 1 | 3 | 30 | 200 |
| KTA 21 | 0.21 | 0.64 | 2 x 3.16 | 2 x 21 |
| SR 121 | 1 | 3 | 30 | 200 |
| KTA 22 | 0.22 | 0.66 | 2 x 3.3 | 2 x 22 |

Blend viscosity evolution @ 25 °C

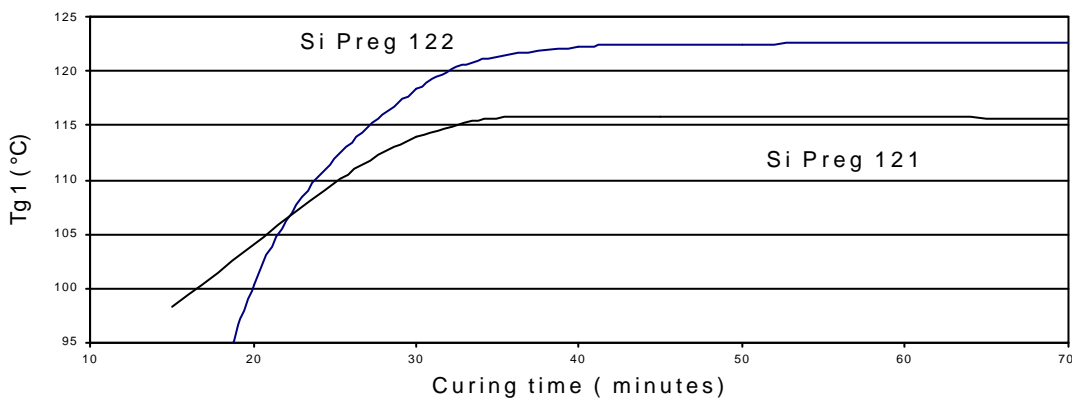




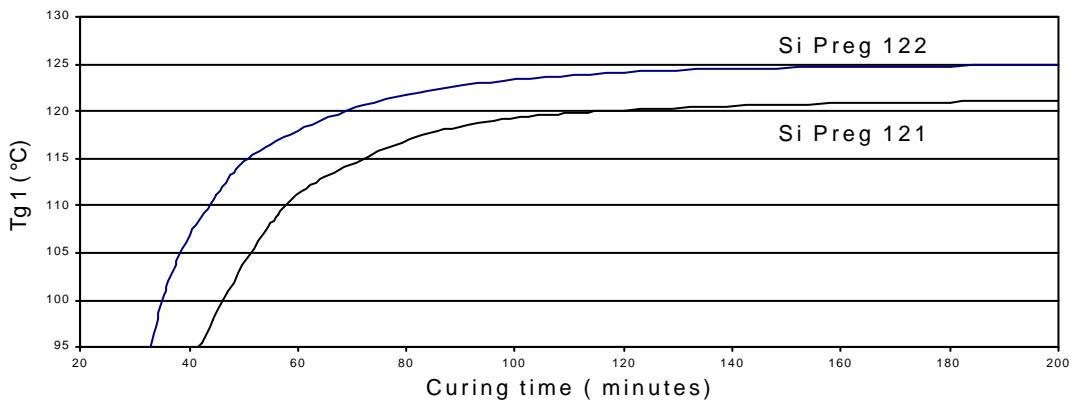
Kinetic @ 150 °C



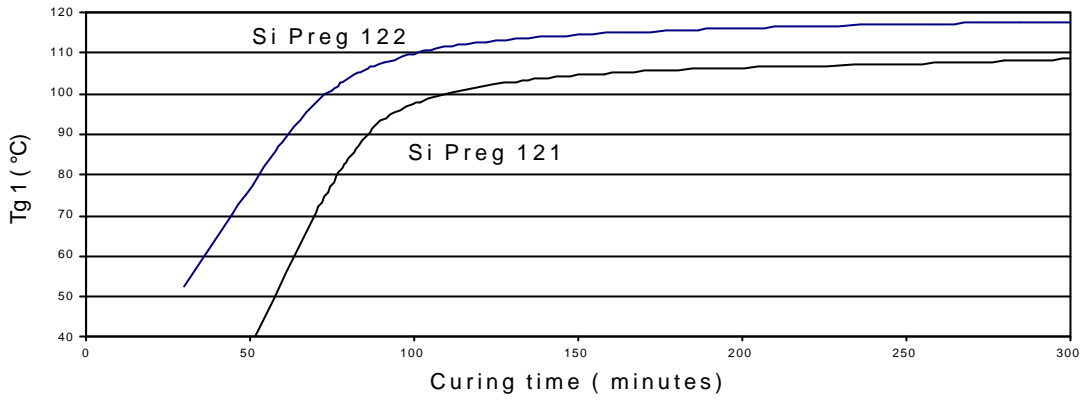
Kinetic @ 130 °C



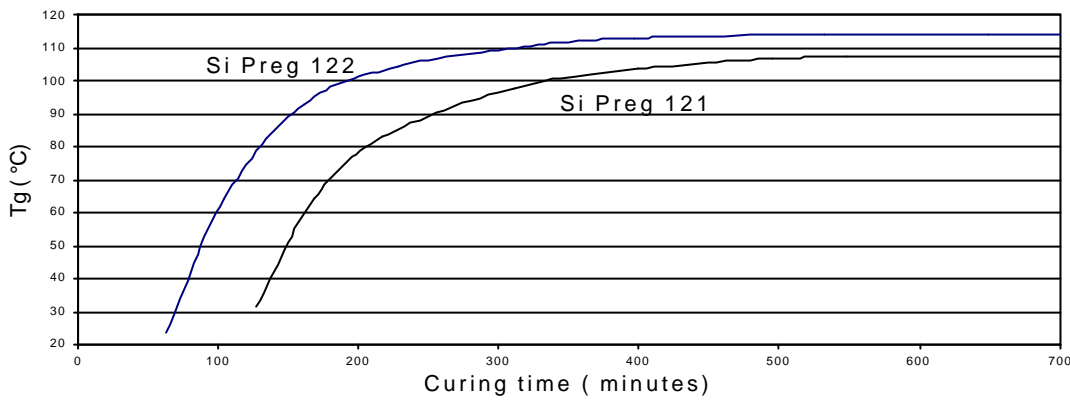
Kinetic @ 120 °C



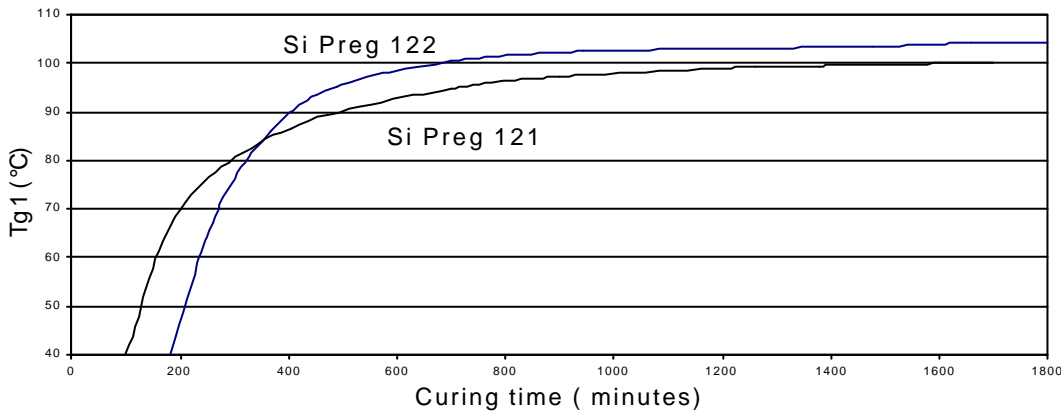
Kinetic @ 110 °C



Kinetic @ 100 °C



Kinetic @ 90 °C



Kinetic @ 80 °C

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