



TECHNICAL DATA SHEET

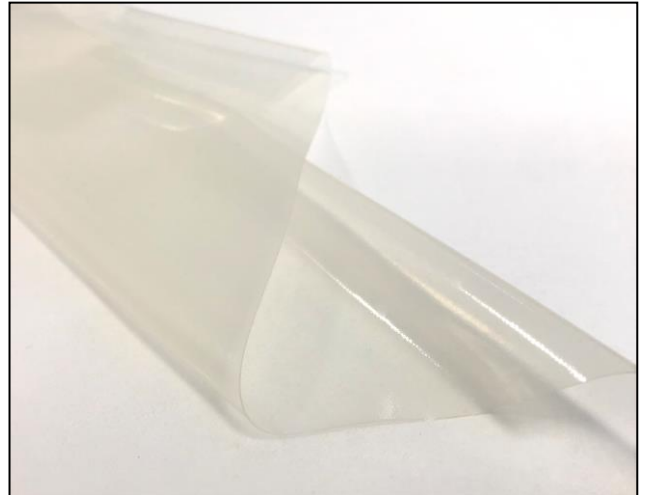
SK2RS250-1

Highly-elastic cured silicone membrane for vacuum bagging

► DESCRIPTION

SK2RS250-1 is a high performance, reusable highly-elastic cured silicone membrane designed for composite manufacturing. It provides the reliable, high quality solution required in vacuum moulding and laminating methods of composite production.

SK2RS250-1 is reusable, providing a cost effective and environmentally-friendly alternative to disposable plastic bags in the VARTM (Vacuum Assisted Resin Transfer Moulding) and SCRIMP (Seemann Composites Resin Infusion Moulding) processes.



The silicone membrane is available in both cured SK2RS250-1 and SK2RS250-2 as uncured version. Cured material has a fine fabric impression to aid removal.

The silicone material of SK2RS250-1 is flame resistant which provides an extra level of safety within your application. The membrane also provides excellent UV and ozone resistance, as well as strong chemical resistance, making it the ideal solution in manufacturing processes of parts made of composite materials.

► ADVANTAGES

- Reusable up to 100 times* (less waste so more environmentally friendly, time and money saving)
- Repairable
- Improved ergonomics for operators
- Excellent UV and ozone resistance
- Cost effective alternative to disposable bags
- Good chemical resistance
- Highly durable over a wide temperature range (-40°C to 200°C)
- High tear resistance
- High elongation with low modulus
- Flame resistant
- Will not crease like nylon film
- Translucent sheeting means resin flow can be observed

* The number of cycles depends on application temperature and the aggressiveness of the medium in which the membrane is used.



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► TECHNICAL DATA

Material type: Silicone
Color: Grey or translucent
Maximum use temperature: 250°C
Cure Conditions: 116°C for 5 min with 1.4MPa (200psi) of pressure

Mechanical properties of cured product*

| Property | Test method | Specification | Units |
|---------------------|---------------------------|------------------------|-------------------|
| Hardness | ASTM D2240 | 51 | Shore A |
| Density | ASTM D792 | 1.15 | g/cm ³ |
| Tensile strength | ASTM D412 DIE C | 10 | MPa |
| Elongation at break | ASTM D412 DIE C | 600 | % |
| Tear strength | ASTM 624 DIE B | 33 | KN/m |
| Compression set | ASTM D395 22h at 177°C | 45 4 hours at 200°C | % |
| Dielectric Strength | | 20 | Kv/mm |
| Thermal Expansion | | 6.5 | m/m°C |

* The values are average values for the cured product.

Shelf Life: for uncured material: 6 months from date of manufacture when stored at 24°C wrapped as supplied.

For cured material: unlimited when stored in original packaging at 22°C.

► NOTE

Available thicknesses: from 0.3mm to 3.5 mm.

Standard widths of up to 1500mm