SCOTTAM ADVANCED MANUFACTURING

# 8263 Resin Data Sheet

## Specification

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|---|---|---|---|
| **Description** | | | **Flame retardant, good impact strength** |
| **Features** | | | **Certified fire retardant UL94V-0** |
| **Suitable for** | | | **Electrical enclosures** |
| **Cured properties** | | | **Test / ISO standard where applicable** |
| Colour | | White | |
| Transparency | | Translucent | |
| Shore hardness | At 23 °C<br>At 60 °C<br>At 80 °C | 83 D<br>80 D<br>80 D | 868 |
| Flexural strength | | 93 N/mm² | 178 |
| Flexural modulus | | 2200 N/mm² | 178 |
| Tensile strength | | 68 N/mm² | R 527 |
| Tensile modulus | | Not measured | R 527 |
| Izod impact | | 10 kJ/m² | 180 |
| Yield strength | | Not measured | R 527 |
| Elongation yield | | Not measured | |
| Elongation at break | | 15 % | R 527 |
| Tear strength | | Not measured | 34 |
| Thermal conductivity | | 7 W/mK | BS 874 |
| Heat deflection temperature<br>(test piece 110 mm × 12.7 mm × 6.4 mm) | | 80 °C | |
| Glass transition temperature | | Not measured | |
| **Processing information** | | | **Notes** |
| Viscosity | Part A<br>Part B | 1000 cPs<br>160 cPs | At 25 °C |
| Specific gravity | Part A<br>Part B | 1.30<br>1.19 | At 25 °C |
| Mix ratio A:B | | 100:150 | By weight |
| Mixing time | | 60 s | |
| Resin temperature | | 40 °C | Heating chamber |
| Mould temperature | | 70 °C | Heating chamber |
| Curing temperature | | 70 °C | Heating chamber |
| Curing time in mould | | 60 min | |
| Pot life | | 360 s | 100 g at 25 °C |
| Post curing process | | None | |
| Typical shrinkage | | 0.3 % | |

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# HANDLING PROCEDURE

## Casting procedure

- Shake unopened A and B component cans vigorously for 10 s to 15 s
- Pre-heat mould in oven at 70 °C
- Pre-heat unopened A and B component cans in oven at 70 °C for 2 hours, then place in oven at 40 °C to stabilise prior to use
- Weigh A and B components into separate cups, allowing for cup loss (the amount of resin left in cup A after tipping)
- When using the C component please, weigh out B component and then add C component to same mixing cup according to the required mixing ratio
- Add colour pigment to cup A
- Place filled cups in the machine and attach mixing paddle to cup B
- Start vacuum pump
- Switch on mixer motor
- Wait 10 minutes after reaching maximum vacuum level before mixing
- Pour contents of cup A into cup B and mix as fast as possible without splashing
- Pour mixed resin into silicone mould and leak vacuum chamber before the end of the pot life
- Place filled mould in oven to cure resin

## Special notes

- Exact mould temperature is important
- Exact resin temperature is important
- Use no more than 2% of total weight colour pigment

## Product information

- **Mould life**
  Mould life can be increased by using the correct Scott AM release agent and demoulding the casting immediately after curing.
- **Storage**
  Store unopened cans at > 20 °C
  Protect against frost
  Store opened cans in oven at 40 °C with caps on
  All components are sensitive to humidity.
- **In case of crystallisation of B-component**
  Place cans in oven at 70 °C for 2 hours then transfer to 40 °C oven to stabilise prior to use.

Please follow the correct procedure for use of your vacuum casting system, as set out in its operating instructions.

Always follow the instructions in the Product Safety Data Sheets and always work in accordance with the safety instructions of the materials manufacturer. Safety Data Sheets can be found at www.scott-am.com.

Wear suitable respiratory protection, safety gloves and safety goggles during the entire filling procedure in accordance with the Product Safety Data Sheets.