

AS2500

Characterization

AS2500 is a novel twin pack system, which consists of a 1-part RTV Silicone Sealant and an accelerator in a 10:1 mix ratio. By extruding the system through a static mixer nozzle, the intimately mixed material behaves like a conventional silicone sealant, but has the advantage of very rapid cure – less than 3 hours to almost full cure, allowing for very fast assembly. The sealant will cure anaerobically (without atmospheric moisture) in approximately 2 hours which is not possible with a conventional 1-part RTV sealant.

Key Features:

- Very fast room temperature cure
- Good adhesion to most substrates
- Anaerobic cure
- Low odour

Technical Data

| | AS2500 | | |
|------------------------------|---|---------------------|-------------------|
| | Mixture | | |
| Cure Type | Acetoxy | | |
| FDA | No | | CFR (21) 177.2600 |
| Mixing ratio | 10 : 1 | according to weight | |
| Max cure @ 25°C | 1.5 | H | |
| Extrusion Rate | 304 | g/min | |
| Rheology | Paste | | |
| Self Bonding | Yes | | |
| Tack Free Time | 4 | Min | |
| Colour | Black | | |
| Cured product | After 7 days at 23°C +/-2°C and 50% +/- 5% humidity | | |
| CTE Linear | 292 | ppm/°C | |
| CTE Volumetric | 876 | ppm/°C | |
| Duro Shore A | 39 | | ASTM D 2240-95 |
| Working Temp. | -50 to 250 | °C | AFS-1540B |
| Tensile | 2.32 | MPa | ISO 37 |
| Elongation | 280 | % | ISO 37 |
| Modulus Youngs | 0.65 | MPa | |
| Modulus @ 100% Strain | 0.91 | MPa | |
| Tear | 5.5 | kN/m | ISO 34-1 |
| Linear Shrinkage | 1 | % | |
| SG | 1.05 | | BS ISO 2781 |

| | | | |
|-----------------------------|----------|---------|------------|
| Thermal Conductivity | 0.2 | W/mK | |
| UL 94V-0 | No | | |
| Electric properties | | | |
| Dielectric Constant | 3 | 1kHz | ASTM D-150 |
| Dielectric Strength | 18 | kV/mm | ASTM D-149 |
| Dissipation Factor | 0.0025 | 1kHz | ASTM D-150 |
| Surface Resistivity | 4.70E+14 | Ohms | ASTM D-257 |
| Volume Resistivity | 7.77E+15 | ohms*cm | ASTM D-257 |

Storability / Storage

When proper storage approx. 12 months if stored properly max. at 40°C and protected from frost and dry in closed original containers.

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Application Technique

AS2500 is supplied as a twin pack 10:1 system. When supplied in bulk containers A and B parts should be mixed at a ratio 10:1 by volume using an automated machine with a static mixer nozzle.

IMPORTANT:

Mixed material in the mixer nozzle will cure quickly, therefore a continuous application process will avoid wasted material. A mixer nozzle of at least 9 GXF type elements is recommended for uniform mixing of both components.

The product can also be supplied in a high-quality twin cartridge system, the A part in a 240 ml cartridge and the B part in a 24 ml integral cartridge. To facilitate removal of the protective, plug a metal removable disc is located above the locking nut. The action of unscrewing the locking nut removes the plug. The static mixer nozzle is placed on the outlet and locked into place using the locking nut (13mm). The stepped outlet of the static mixer nozzle is normally cut back 2 or 3 steps before fitting the cartridge into the dispensing gun*. The cartridge is then located in the gun and pressed to click into place.

The sealant is extruded by applying a steady pressure to the trigger. In the case of the manually operated dispenser, full depression of the trigger should be maintained for as long as possible before releasing and reapplying trigger pressure. Complete mixing of each component is achieved within the first 50-60% of the nozzle. All substrate surfaces should be clean and free of grease, the mixed sealant should be applied to one surface and contact made immediately, any additional tooling should be carried out within the tack free time shown opposite. Full cure times will vary slightly depending on the joint dimensions.

*Excellent dual cartridge dispensers both manual and pneumatic are available from Sulzer Mixpac (UK) Limited – Ref. DSM200.

It is absolutely important to check the compatibility in preliminary tests if unknown substrates are used.

Safety

Please observe our EC safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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