

U RESIN OC80D



U RESIN OC80D is a new two-component low viscosity water clear polyurethane system specifically formulated for applications where clarity is a must. Initial testing shows product to be non-yellowing however further testing is being conducted.

The product is recommended in applications when yellowing due to exposure to sunlight needs to be minimised. It can be used in a number of diverse applications ranging from special effects, prototype parts, windows and display devices.

PROFILE:

| | PART A | PART B | MIXED |
|---|-------------|-------------|-----------|
| Colour | Water Clear | Water Clear | |
| Mix Ratio (by Weight) | 100 | 43 | |
| Pot Life @ 25°C (mins) | | | 10 |
| Temperature (°C) | 20-30 | 20-30 | |
| Cure Time @ 60°C (hours) | | | 16 |
| Demould Time @ 25°C (hours) | | | 2-3* |
| Demould Time @ 60°C (hours) | | | 1* |
| Post Cure Time @ 25°C (days) | | | 7 |
| Viscosity at 25°C (cps) | 720 | 200 | |
| Specific Gravity at 25°C | 1.02 | 1.05 | |
| Hardness (Shore D) | | | 80 ± 5 |
| Tensile Strength (MPa) | | | 38 |
| Elongation (%) | | | 5 |
| Angle Tear Strength (kN/m) | | | 117 |
| Elongation (%) | | | 5 |
| Cured Specific Gravity (g/cm ³) | | | 1.05-1.10 |
| Average Izod Impact Strength (kJ/m ²) | | | 38.07 |
| Average Energy Absorbed (Izod Test) (kg/cm) | | | 15.5 |

The above results are based on 143 gram of mixed sample at 25°C. * Demould time will depend on the size and cross section of material.

Both Part A and Part B components are moisture sensitive. Once opened, containers should be purged with nitrogen, if they are to be stored for a period of time.

PROCESSING PROCEDURE:

U RESIN OC80D products can be processed by hand or machine dispensing equipment.

1. Weight the amount of Part A into a container and degas at -95kPa of vacuum until excessive foaming stops.
2. Part B should be added to Part A and mixed thoroughly. Be careful not to entrap air whilst mixing. (It can be advised that the mixed product can be degassed at -95kPa of vacuum if required.)
3. Pour the mixed materials into moulds that have been prepared with a suitable release agent if casting demouldable parts.
4. Allow casting to cure before demoulding.

NOTE: Part B must be completely stirred mechanically before use.

ADHESION:

Adhesion of U RESIN based elastomers to various substrates is at best marginal if a primer is not used.

HANDLING PRECAUTIONS:

U RESIN OC80D should be used in a well-ventilated area. Avoid breathing in vapours and protect skin and eyes from contact. In case of skin contact remove excess, wash with soap and water. For eye contact, immediately flush with water for at least 15 minutes. Call a physician. If nose, throat or lungs become irritated from breathing vapours, remove exposed person to fresh air. Call a physician.