

U RESIN OC93A



U RESIN OC93A is a two-component, water clear polyurethane that cures at room temperature to produce a 93 Shore A elastomer. This material when cured at 25°C will take longer than 24 hours to reach 93 Shore A. The material can be cured for 2-4 hours at 35-40°C to speed up the cure.

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 Ration (by Weight)	100	52	
Pot Life @ 25°C (mins)			12
Temperature (°C)	20-30	20-30	
Demould Time @ 25°C (hours)			24
Post Cure Time @ 25°C (days)			7
Viscosity at 25°C (cps)	560-1160	130-330	
Specific Gravity at 25°C	1.02	1.03	
Hardness (Shore D)			93 ± 5
Tensile Strength (MPa)			20
Elongation (%)			400
Angle Tear Strength (kN/m)			42
Elongation (%)			5

The above results are based on 200 grams 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.

MOULDING MATERIAL:

The U RESIN OC products can be poured into a urethane mould that has been prepared with an appropriate release agent/ The URESIN OC products can be used in silicone moulding materials but they must be addition-cured silicones. Contact U RESIN about specific grades of silicones that are suitable. Post curing U RESIN OC products at 50-60C for 6-8hours can improve the surface finish/

PROCESSING PROCEDURE:

U RESIN OC93A 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 OC93A 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.