Era Polymers Pty. Ltd.
25-27 Green Street, Banksmeadow
Sydney, NSW 2019
AUSTRALIA
www.erapol.com.au

Erapol OC60A

WATER CLEAR POLYETHER BASED URETHANE ELASTOMER

TECHNICAL DATASHEET

Erapol OC60A is a two component, water clear polyurethane that cures at room temperature. It can be used in a number of applications from special effects and any product requiring optical clarity.

The product is recommended in applications when yellowing due to exposure to sunlight needs to be minimised.

Product Specification

	Part (A)	Part (B)
Specific Gravity at 25°C	1.02 ± 0.03	1.05 ± 0.03
Viscosity at 25°C (cps)	860	250
Appearance	Water clear	Water clear

Mixing and Curing Conditions

Part (A)	(pbw)	100
Part (B)	(pbw)	85
Recommended % Theory		95
Part A Temperature	(°C)	25 ± 5
Part B Temperature	(°C)	25 ± 5
Pot Life	(mins)	15 - 17
Demould Time at 25°C	(hrs)	24
Post Cure Time at 25°C	(days)	7

Physical Properties

Properties presented below are to be used as a guide and not intended for specification purposes.

		OC60A	TEST METHOD
Hardness	(Shore A)	60 ± 5	AS1683.15
Tensile Strength	(MPa)	5	AS1683.11
Angle Tear Strength, Die C	(kN/m)	17	AS1683.12
Elongation	(%)	330	AS1683.11

Moulding Materials

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

NOTE: 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. Part A should be clear, if it goes cloudy warm to 40°C for 1-2 hours until it goes clear.

Processing Procedure

Erapol OC60A products can be processed by hand or machine dispensing equipment. Do not cast this material when the Part A or Part B temperature is below 20°C as it will take too long to cure. **OC60A** must be cured in a room where the temperature does not drop below 20°C, this is critical in winter.

1. Weigh the amount of Part A into a container and degas at -95 kPa of vacuum until excessive foaming stops.

2. Part B should be added to Part A and, mix 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.

4. Allow casting to cure before demoulding.

NOTE: PART B must be completely stirred mechanically before use. In the colder months it may also be necessary to slightly warm the Part B (40oC) as it may solidify.

Handling Precautions

Erapol OC60A should be used in 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 in vapours, remove exposed person to fresh air. Call a physician.