# 80331

**Sterling 80331** is a light tan color Shore D72 polyurethane rotocasting system. Advantages of this system are low viscosity, easy and fast processing (1:1 volume ratio, fast demold), as well as good physical properties.

This formula is a polyether polyol/MDI based extended system. It can easily be pigmented as well as filled with most types of mineral fillers, plastic or glass microspheres.

The recommended processing includes: roto-molding, injection molding, and open pour.

This system is molded into any major type of molds: RTV silicone, metal, urethane, etc.

## **Storage and Mixing**

Both A and B components are very stable mixtures. However, we suggest re-mixing the B-component at least once a week. Recommended storage temperature is 70-105°F.

Store containers tightly closed since this material is moisture sensitive. If properly stored, the shelf life is 6 months or more.

#### **Processing**

This system cures at room temperature (77°F). We recommend preheating the mold to at least 100°F (preferably 120-140°F) if the final part consists of thin sections.

#### Note

For industrial use only.
Use for reference purpose only.
Refer to the material safety data sheet for additional information.
Use proper ventilation.

### **Processing Data**

| Mix Ratio By volume By weight | A: 1 pbv B: 1 pbv<br>A: 100 pbw B: 90 pbw |            |  |
|-------------------------------|---|------------|--|
| Specific Gravity              | A: 1.11                                   | B: 0.99    |  |
| Viscosity                     | A: 50 cps                                 | B: 100 cps |  |
| Gel Time                      | 3.5-4 minutes (mass dependant)            |            |  |
| Demold Time                   | 10-15 minutes (mass dependant)            |            |  |

## **Physical Properties**

| Hardness (D-2240)             | D 70 +/-2      |  |
|-------------------------------|----------------|--|
| Flexural Strength (D-790)     | 4,600 psi      |  |
| Flexural Modulus (D-790)      | 150,000 psi    |  |
| Tensile Strength (D-638)      | 2,600 psi      |  |
| Ultimate Elongation (D-638)   | 15%            |  |
| Tear Resistance/Die-C (D-624) | 250 pli        |  |
| Izod Impact-Unnotched (D-256) | 6.50 ft-lbs/in |  |
| Izod Impact-Notched (D-256)   | 0.5 ft-lbs/in  |  |
| HDT @66psi (D-648)            | 140 °F         |  |
| HDT @264psi (D-648)           | 130 °F         |  |