

Technical Data Sheet

Roto-Molding Resins

RotoMolding Resins are specifically formulated 2-component 100% solids hybrid polyurea-based material designed to produce dimensionally stable, structural hollow part moldings. This material is normally batch-mixed and poured into hollow room-temp mold. Solidification times may be tailored to accommodate large part or intricate moldings. Casting material is normally applied at room temperature. Resins may be colored-tinted as well as durometers may be formulated to range from 60A-75D. Resins may be neat or filled to meet material shrinkage requirements (1% to 0.5% respectively). Material formulations functional operation temperatures may be formulated to range from -20°F to 200°F.

Physical Properties

RotoMolding Resin 45D Physical Properties

Color/Clarity Visual Amber/Opaque

Flex Modulus ASTM D790 150k psi

Tensile Strength ASTM D412 3500 psi

Hardness ShoreD ASTM D785 45D

Abrasion -TaberCS17 ASTM D4060 55 mg/1k cycles

Gel Time Time Formulated to spec.

Mix Ratio A:B PBV 1:1

RotoMolding Resin 60 A Physical Properties

Color/Clearity Visual Clear

Flex Modulus ASTM D790 200k psi

Tensile Strength ASTM D412 1200 psi

Hardness ShoreD ASTM D785 60 A

Abrasion - Taber CS17 ASTM D4060 50 mg/1k cycles

Gel Time Time 6 min.

Mix Ratio A:B PBV 1:1

RotoMolding Resin 70D Physical Properties

Color/Clearity Visual Amber/Opaque

Flex Modulus ASTM D790 327k psi

Tensile Strength ASTM D412 5470 psi

Hardness ShoreD ASTM D785 70D

Abrasion -TaberCS17 ASTM D4060 75 mg/1k cycles

Gel Time Time Formulated to spec.

Mix Ratio A:B PBV 1:1

Rotomolding Resin 75D Physical Properties

Color/Clearity Visual Amber/Opaque

Flex Modulus ASTM D790 350k psi

Tensile Strength ASTM D412 5700 psi

Hardness ShoreD ASTM D785

Abrasion -TaberCS17 ASTM D4060 75 mg/1k cycles

Gel Time Time Formulated to spec.

Mix Ratio A:B PBV 1:1

Application Instructions

RotoMold Casting Resins must be mixed thoroughly prior to dispensing into roto-mold. It is very important not to induce air when mixing. Entrapped air will cause bubbles and micro porosity internally and on the exterior surface. For fiberglass molds use hi-temp paste wax. Resins may be dispensed using low pressure static mixer machine equipment. Please call our Technical Support Group or for any questions regarding material, application or direction of use.

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