

Technical Data Sheet

MoldMaker

MoldMaker is specifically formulated resin to produce dimensionally stable molds. This 2-component 100% solids polyurethane-based material is available in both 48-55 Shore A hardness. Flexible MoldMaker allows mold makers to incorporate no-draft deep side walls and undercut geometry. These resins may be pour cast, RIM injected or cartridge gun dispensed to create production molds, master plugs, secondary holding fixtures or final parts. Cured materials are extremely tough and exhibit excellent durability against abrasion, exothermic part cycling and cleaning chemicals. With these high performance properties, aggressive die angles, high content fiber reinforcement loading and fast part cycles are achieved. Thin film polyethylene or acetate vac bag liners and silicones are best suited to prep mold surfaces prior to part molding. MoldMaker delivers a 10-12 minute reaction time to provide quick mold builds and/or part formation. These formulations may also be color tinted. Material functional operation temperature ranges from -40°F to 200°F.

Physical Properties

MoldMaker-55 Physical Properties

Color/Clearity	Visual	Amber/Opaque
Flex Modulus	ASTM D790	35k psi
Tensile Strength	ASTM D412	2000 psi
Hardness -Shore A	ASTM D785	55
Abrasion -TaberCS17	ASTM D4060	50 mg/1k cycles
Tear Strength	ASTM D624	250 lbs/ linear in.
Gel Time	Time	10-12 min
Mix Ratio	PBV	1A:3B

MoldMaker-48 Flexible Physical Properties

Color/Clearity Visual Amber/Opaque

Flex Modulus ASTM D790 25k psi

Tensile Strength ASTM D412 1800 psi

Elongation ASTM D412 400%

Hardness -Shore A ASTM D785 48

Abrasion -TaberCS17 ASTM D4060 50 mg/1k cycles

Tear Strength ASTM D624 200 lbs/ linear in.

Gel Time Time 10-12 min

Mix Ratio PBV 1A:5B

Mixing Instructions

MoldMaker may be mixed and dispensed using a plural component pumping machine for pour casting or RIM injection. It also may be dispensed using pneumatic cartridge guns with static mixer tubes or hand batch mixed in bucket using jiffy mixer. When hand mixing, stir slowly and carefully as to not induce air into resin mixture. Cured molding material produces a smooth glossy surface. Surface preparation of master plugs or forms is directly reflected to mold the surface. To obtain a Class A mold surface, mold surfaces must be polished smooth and free of pin holes. MoldMaker must be poured from bottom-up as to avoid air pocket trapping. For closed mold RIM, always provide adequate air-bleed tunnels or vents throughout mold perimeter. Just after the completion of liquid resin mold pour, small entrapped air bubbles may be relieved by quickly waving over the pour surface with propane torch. Please email our Technical Support Group for any questions regarding material, application or direction of use.