



PRODUCT INFORMATION

HIGH TECHNOLOGY MATERIALS

MEREKO METASIL 5023 TWO-COMPONENT ADDITION CURE MOLD-MAKING MATERIAL

MEREKO METASIL 5023 is a two-component room temperature silicone mold making material offering excellent detail reproduction, low viscosity, high tear/cut resistance and excellent release for long-lasting molds. METASIL 5023 has high temperature and chemical resistance with excellent flexibility and low shrinkage which makes it suitable for all types of cast plastics.

METASIL 5023 is designed to have high durometer with excellent release allowing for easy demolding of even highly detailed models. Mereco recommends a 5-15% solution of Vaseline or Petroleum in Naptha or Xylene as a release coat.

The release solution can be brushed onto the model. Allow the solvent to flash off. If the model is to be encapsulated, an appropriate box or fixture should be developed. The box or fixture should be coated with the release agent as well as to prevent mechanical abrasion. The METASIL 5023 should be applied to an obscure portion of the model to test for proper release and compatibility.

METASIL 5023	
Cure Type	Addition
Form	Flowable
Cured Form	Rubber
Mix Ratio	10:1
METASIL 5023 is good for use with the following casting materials:	
Acrylic, Concrete, Gypsum Wax, Epoxy Polyester, Polyurethane, PVC, wood Pulp	
METASIL 5023 is suitable for:	
Laminate Molding, Bladder and Bag Molding, Pad Printing, Prototype Tooling, Figurines, Furniture, Art, Castings, etc.	

TYPICAL PROPERTIES

	<u>5023 Resin</u>	<u>5023 Act.</u>
Viscosity, cps	15,000	10,000
Sp. Gravity	1.10	1.10
Color	Clear	Clear
Form	Liquid	Liquid
Mix Ratio	10:1	
Mixed Viscosity, cps	12,000	
Working time, hrs.	2.5	
Cure Time @ 25°C	4 days	
Cure Time @ 65°C	2 hrs.	
Cure Time @ 100°C	30 min.	
Cure Time @ 150°C	15 min.	
Durometer, Shore A	30 +/- 5	
Tensile, psi	725	
Elongation %	425	
Tear B, ppi	115	
Linear Shrinkage, %	0.1%	

Handling Instructions: Weigh 10 parts of activator to 100 parts resin. Mix for a period of time until mixing is complete. Degass for 10 minutes under a vacuum of 25-29 inches of Mercury. Pour slowly into mold box so as not to entrap air. Cure according to the cure schedule desired.

Note: Certain substances may inhibit the cure of **Metasil 5023** by direct or indirect contact. Metallic salts, butyl, PVC plasticizers, chlorinated rubber, amines and sulfur containing materials may all inhibit the cure.

Storage and Handling: Mereco Metasil 5023 has a shelf-life of six months from date of shipment when stored in original unopened containers at a temperature below 25°C.

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