



# PRODUCT INFORMATION

## HIGH TECHNOLOGY MATERIALS

### MERECO METASIL 5024T Mod 4 THERMALLY CONDUCTIVE, ADDITION CURE SILICONE RTV

**Mereco Metasil 5024T Mod 4** is a two-component, solventless, addition curing silicone RTV material specifically designed for applications where a thermally conductive, thixotropic, medium durometer material is required. **Metasil 5024T Mod 4** has high temperature and chemical resistance with excellent flexibility and low shrinkage.

#### TYPICAL PROPERTIES

Metasil 5024 T Mod 4      Metasil 5024 T Mod 4

	<u>Resin</u>	<u>Activator</u>
Viscosity, cps	Thixotropic Paste	Thixotropic Paste
Sp. Gravity	1.7	1.7
Color	Gray or Blue	Gray
Form	Thin Paste	Thin Paste
Mix Ratio wt/vol,	1:1	
Mixed Viscosity, cps		Thixotropic paste
Working time, 100 gms.	30 minutes	
85% Cure time		20-24 hours
Cure Time @ 25°C		2 days
Cure Time @ 65°C		2 hrs.
Cure Time @ 100°C		30 min.
Cure Time @ 150°C		15 min.
Glass Transition Temperature		-48 °C
CTE, um/m °C		220
Durometer, Shore A		50 +/- 5
Tensile, psi		725
Elongation %		325
Tear B, ppi		50
Linear Shrinkage, %		0.1%
Temp. Range	-55°C to +200°C	
Dielectric strength	450 volts/mil	
Dielectric Constant 1 KHz	3.0	
Dissipation Factor 1 KHz	0.004	
Volume resistivity, ohm-cm	7 X 10 <sup>14</sup>	
Thermal conductivity	3.7	

(Btu · in<sup>-1</sup> · hr<sup>-1</sup> · ft<sup>2</sup> · °F<sup>-1</sup>)

**Handling Instructions:** Weigh 100 parts of activator to 100 parts resin. Mix for a period of time until mixing is complete. Degas for 5 minutes under a vacuum of 25-29 inches of Mercury. Apply material. Cure according to the cure schedule

desired. If dual cartridges are used, the material may be directly applied using a static mixer.

**Note:** Certain substances may inhibit the cure of **Metasil 5024T Mod 4** 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 5024T Mod 4** has a shelf-life of six months from date of shipment when stored in original unopened containers at a temperature below 25°C.

#### FEATURES/BENEFITS – METASIL 5024T MOD 4

High thermal conductivity  
 Little increase in modulus at low temperature  
 High chemical and temperature resistance  
 Heat or room temperature cure capability  
 Excellent flexibility, elastomeric properties  
 Medium durometer, good dampening  
 Low shrinkage, low stress on components  
 Good tear strength  
 No exotherm  
 No inductance change during temp. cycling  
 Low Tg

METASIL 5024T MOD 4 is available in pint, quart, 2 quart, and 2 gallon kits as well as 50ml, 200ml, and 400 ml dual cartridges.

Refer to Mereco TAB 3-641 for proper operation of 50cc dual cartridges using a manual dispenser. Pneumatic dispensers are also available. For 200 ml and 400ml dual cartridges pneumatic dispensers are recommended if small quantities of material are to be applied. Contact Mereco if further information is required.

Technical information and recommendations made by Mereco Division and Metachem Resins Corporation concerning products and uses or applications thereof, are based on reliable laboratory tests and are believed to be accurate. No warranty, however, is expressed or implied, nor is any warranty expressed or implied as to results to be obtained from use of said materials, whether used singly or in combination with other products. No statements made are to be construed as constituting a license under any existing patent.

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