M-Coat Type 5 Kit

M-COAT DESCRIPTION AND APPLICATIONS	CURE REQUIREMENTS	SHELF LIFE	OPERATING TEMPERATURE RANGE
M-Coat A Air-drying solvent-thinned (xylene) polyurethane. Transparent. Moderate hardness; good flexibility. Can be removed with Rosin Solvent or toluene. Film thickness 0.005-0.01 in (0.1-0.25 mm) per coat. General-purpose coating for lab use, and as base coating for field applications. Must be fully cured before addition of other coatings. Fair moisture resistance. Not readily attacked by many solvents. Convenient to use.	Dries tack-free at room temperature in 20 min. Completely dry in 2 hr. Normal cure 24 hr at room temperature. Chemical resistance and coating hardness increase for 6 to 7 days.	Minimum 1 yr at +75°F (+24°C)	SHORT TERM -100° to +300°F (-75° to +150°C) LONG TERM -100° to +250°F (-75° to +120°C)
M-Coat B Air-drying solvent-thinned methyl ethyl keytone (MEK) nitrile rubber. Forms flexible rubbery coating. Do not use directly on exposed foil or bare leads. If used as primer on leads, thin 50:50 with MEK. Sometimes used to prime vinyl-insulated wire to improve bondability to other coatings. Flexible at cryogenic temperatures. Excellent resistance to gasoline, kerosene, commercial oils. Electrical properties poorer than other M-Coats, particularly at high temperatures.	Air-dries in 1 hr at +75°F (+24°C). Do not apply subsequent protective coatings for at least 2 hr from time of application. Normal cure 24 hr at room temperature. Further improve chemical resistance with 1-hr bake at +200°F (+95°C).	Minimum 1 yr at +75°F (+24°C)	SHORT TERM -320° to +300°F (-195° to +150°C) LONG TERM -320° to +200°F (-195° to +95°C)
M-Coat C Solvent-thinned (naphtha) RTV silicone rubber. Cures to tough rubbery transparent film. Good all-around mechanical and electrical properties. Completely noncorrosive. Film thickness 0.015-0.02 in (0.4-0.5 mm) per coat. Recommended for lab and field installations which require a high degree of protection in thin coatings. Good water-splash protection. Good chemical resistance.	Solvents evaporate in about 60 min at room temperature. Allow 20 min drying time between coats. Cures in 24 hr at +75°F (+24°C) and 50% RH. Longer cure at lower humidity.	Minimum 9 mos at +75°F (+24°C) kept tightly sealed	SHORT TERM -75° to +550°F (-60° to +290°C) LONG TERM -75° to +500°F (-60° to +260°C)
M-Coat D Air-drying solvent-thinned (toluene) acrylic. Dense white color for easy visual inspection of coverage. Forms hard thin coating capable of high elongation. Can be removed with Rosin Solvent or toluene. Apply in thin coats to prevent solvent entrapment. Film thickness 0.005-0.01 in (0.1-0.25 mm) per coat. Good general laboratory moisture barrier. Electrical leakage negligible even when uncured. Good base coating for subsequent applications of M-Coat B. Convenient for anchoring and insulating intrabridge wiring and jumper leads. Chemical resistance only fair but can be improved by postcure at +175°F (+80°C) for 30 min.	Solvents evaporate in 30 min at +75°F (+24°C). Fully cured in 24 hr. Overcoats can be applied 30 min from time of application. Coating binder begins to sublimate at +280°F (+140°C), but residue is inorganic and will not become conductive.	Minimum 1 yr at +75°F (+24°C) kept tightly sealed	SHORT TERM -100° to +325°F (-75° to +160°C) LONG TERM -100° to +250°F (-75° to +120°C)