

MC 7010

Room Temperature Moisture Cure Silicone Adhesive Sealant

Typical Properties			
Property	Unit	Value	Test Method
Color / Component		Light Grey	Visual
Density	Gram /cc	1.3	ASTM D792
Extrusion Rate (3 mm nozzle, 0.62 Mpa, 24C)	Gram / min	240	UATM 07005
Skin Over Time (25°C 55%R.H.)	Min	18	UATM 07011
Tack Free Time (25°C 55%R.H.)	Min	45	UATM 07012
Weight loss in cure	Weight %	< 0.6%	TGA
Property as Cured			
Color		Light Grey	Visual
Hardness	Shore A	18	ASTM D2240
Tensile Strength	Mpa	1.3	ASTM D638
Elongation	%	600	ASTM D638
Adhesion (Al/Al lap shear @25C)	psi	140	ASTM D3163
Dielectric Constant	@100Hz	3	ASTM D150
Dissipation Factor	@100 Hz	< 0.01	ASTM D150
Dielectric Strength	Volt/mil AC	> 420	ASTM D149
Volume Resistivity	Ohm-cm	> 10E+14	ASTM D257
Tg	°C	-120	TGA
Useful Temperature Range	°C	-55 to 200	TGA

These figures are only intended as a guide and should not be used in preparing specifications.

Characteristics

MC 7010 is a room temperature cure silicone adhesives sealant. It is a one-component, non-slump silicone paste that cures when it is exposed to ambient moisture. After cure, it forms a soft rubber with strong tensile strength and long elongation. It bonds to most metals and plastics, such as aluminum, copper, PBT, ABS, Nylon, with excellent bonding strength. It can be automated to dispense from pail or extruded from cartridge.

Special Features and Benefits

- One part and non-slumping
- Strong bonding to various substrates
- Very flexible over -40°C to 180°C
- Extremely low thermal stress

Typical Applications

- Seal lids, covers, housings, connectors
- Form compression gaskets
- Water resistant sealing
- Automotive electronics
- Semiconductor and Telecommunications
- Vibration dampening
- Thermal stress coupling

For natural cure version of RTV sealants, please select United Adhesives' products MC 7130 and MC 7240.

Processing Instruction

Important! To reach good bonding, the surface to be bonded to needs to be clean and free of oil, grease, lubricants, soaps, dust, mold release agents, etc. MC 7010 is not recommended for use on polycarbonate or in direct contact with gasoline, diesel fuel or hot engine coolant.

We recommend running preliminary tests to optimize conditions for the particular application. The cure of MC 7010 may be accelerated with a higher humidity and temperature. Recommendations for automated dispensing equipment and accelerated cure profiles can be obtained by contacting directly to United Adhesives, Inc.

Storage

MC 7010 has a shelf life of at least 12 months when stored at ambient (<25°C) in the originally sealed container. Storage beyond the date specified does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety information

MC 7010 silicone releases low content of cyclohexylamine volatile by-product in cure process when it is exposed to moisture. Please use adequate ventilation in its cure stage. General hygiene regulations should be observed. Comprehensive instructions are given in the corresponding Material Safety Data Sheets which are available on request from United Adhesives, Inc.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose. For technical, quality, or product safety questions, please contact directly to United Adhesives Inc.