

MU6100AD Technical Documents

Advantages:

- no yellowing
- quick hardening
- 100% complete reaction
- support sanding
- translucent or foggy
- no special surface treatment is required

Features:

Ambient temperature
hardening (22°C)
Working time:
8-10min
Fixing time:
18-22min
Temperature tolerance:
-55°C-185°C
Specific gravity (22°C)
1.04

Environment characteristics:

- good water resistance
- good impact resistance
- high temperature resistant
- ultraviolet resistant

Applicable materials:

- quartz
- acrylic
- composite acrylic
- polyester
- gel coat
- thermoplastics
- FRP/composite material

MU6100AD is a two-liquid methyl methacrylate adhesive, which has excellent bonding effect on quartz, acrylic and polyester.

When MU6100AD is mixed with MU6100AD hardener at the ratio of 10:1, its working time will be 8-10min and its fixing time will be 18-22min; when the temperature is higher than 26.7°C, the working time will be shortened, as well as the corresponding fixing time; when the temperature is lower than 12.7°C, the contrary will happen.

After MU6100AD is hardened, the transparency of the film is very high, with excellent ultraviolet stability, not yellowing, resistant to high temperature, with good water resistance, impact resistance and wearing resistance.

Physical characteristics (unhardening) - ambient temperature (22°C)

	Main agent	Hardener
Thickness cps × 1000	18-22	4-6
Color	transparent or fog white	transparent
Density	1.04	1.0
Mixing ratio volume	10	1

Note: the error of mixing ratio between main agent and hardener is $\pm 8\%$

Mechanical property (72H after hardening)

— ambient temperature(28°C)

Butt Joint Tensil Strength	
Kg/cm ²	180~220

4-point Bend (ASTM D790)

4-point bending	
Strength Kg/cm ²	200~235

Points for attention:

MU6100AD main agent is flammable, containing methyl methacrylate. It should be kept away from flame, high heat or spark. When it is out of use, it should be sealed in a container. Skin or eye contact should be avoided, if it happened, wash skin or eye with soap and water, wash it with clean water for 15min, then see doctor immediately.

Due to the feature of quick hardening, mixing large amount of MU6100AD will release large amount of heat energy, and release gas at the same time, just like boiling, therefore, the max. coating thickness is 0.85cm.

Operation method:

1、 Operating means and equipment

MU6100AD can be used in manual or automatic coating production line. For automatic coating, 10:1 two-liquid adhesive and measuring/mixing fluid dispenser shall be used (the mixing device should be static mixing tube). But the pipe joints and pump of the fluid dispenser should be made by aluminum or stainless steel, copper or alloy containing copper should not be used, and the material for oil sealing and tightness should be teflon, Teflon clad PVC foam or PE, Viton BUNA-N, neoprene rubber or other elastomer are not allowed. For more information, pls. contact our company.

2、 Bonding method:

- (1) Apply the evenly mixed MU6100AD to any of the two material surfaces to be bonded.
- (2) After applying, joint the surfaces within working time, adjust the contact surfaces, press and fix them.
- (3) After fixing, when MU6100AD is hardened preliminarily (fixing time), the product can be packed or processed further.
- (4) In order to keep the normal speed of hardening, please apply the adhesive at 16°C(60.8°F)~26.7°C(80°F), at a temperature below 16°C, the hardening speed will fall, and at a temperature above 26.7°C, the hardening speed will rise. The thickness of MU6100AD main agent and hardener will change with temperature. In order to keep the measuring/mixing fluid dispenser handling MU6100AD stably, the main agent and the hardener should be kept at proper temperature.
- (5) Maximum thickness of coating should not exceed 8.5mm(0.335).

Storage period:

Keeping MU6100AD at 10°C(50°F)~18°C(64.4°F), the storage period for main agent is 24 months from manufactured date, the storage period for hardener and tube packing is 18 month. Being kept at temperature above 24°C, the storage period will be shortened, while kept at 7.2°C(45°F)~12.7°C(55°F), the storage period will be increased.。

(1) Working time:

The maximum time to keep bonding surfaces wet and allow the bonding process being completed at 22°C ambient temperature.

(2) Fixing time

At 22°C ambient temperature, the time for the adhesive to complete preliminary hardening, make the joint strong enough and be able to sustain certain external force without deforming, i.e., the time for two pieces of base material of 12.7mm×25.4mm (width) bonded by lap jointing method with the adhesive sustaining 1kg static weight without displacement at 22°C ambient temperature.

(3) The medicine resistance differs significantly with following variables, temperature, concentration, thickness of adhesive, length of time. The data are collected at ambient temperature, and long-time exposure.

(4) All the data and information contained in this document were the latest when the document was prepared. As to the correctness or completeness of these data, we do not guarantee, indicate or implicate anything.