

METHACRYLATE ADHESIVE CHMA420NC

CHMA420NC is a two-component methyl methacrylate structural adhesive, specifically designed for structural bonding of thermoplastics, metals, composite materials, alumina, and other materials. When used with a hardener at a 10:1 ratio, CHMA420NC has an operating time of 3-5 minutes and reaches 75% of its final strength in 8-10 minutes. CHMA420NC has excellent fatigue resistance, impact resistance, high strength, and superior toughness.

Features:

Rapid curing at room temperature . High strength . Minimal surface treatment . High toughness . High cohesive strength . It has a self-priming effect on metals.

Physical properties (uncured) - room temperature

	Main agent	Curing agent
Viscosity, CP	40000-60000	20000-50000
Density, LDS/GAL (G/CC)	1.01	1
Color	translucent	blue
Mixing ratio, volume	10	1
Mixing ratio, weight	8-10	1

At a mixing ratio of 10:1 by volume and an ambient temperature of 25°C.

Operation time: 3-5 minutes

Initial curing time: 5-8 minutes

Temperature range: -55-121°C;

Gap between fillers: less than 5mm

Mechanical properties (after hardening) - room temperature (23°C) Tensile shear

strength

Aluminum/Aluminum (MPa)	15-20	SF/CF
PC/PC (MPa)	6-8	SF
ABS/ABS(MPa)	5-8	SF
Stainless steel / Stainless steel (MPa)	18-22	SF

Applicable materials:

ABS.PVC.PC.PC + glass fiber. PMMA.polyester polyurethane FRP composite materials,Aluminum/Alumina.Steel/Stainless Steel .Other metals.

Precautions:

When not in use, seal the container tightly and avoid contact with skin and eyes. In case of accidental contact, wash skin with soap and water. For eyes, rinse immediately with water for 15 minutes and seek medical attention as soon as possible.

Due to its rapid curing properties, mixing large amounts of CHMA420NC will release a significant amount of heat and gases, similar to boiling. The recommended maximum coating thickness is 0.5 cm.

Operating instructions:

1. Operating Tools and Equipment

The CHMA420NC can be used for manual or automated glue application.

For automated glue application on the production line, a 10:1 two-component metering/mixing dispensing machine is recommended (the mixing device must be a static or dynamic mixing tube). However, all pipe fittings and pumps of the dispensing machine must be made of stainless steel; copper or copper-containing alloys are prohibited. Furthermore, the oil seals and clamps should be made of Teflon, Teflon-coated PVC foam, or PE; Viton, BUNA-N, chloroprene rubber, or other elastomers are not permitted. Please consult our company for relevant information.

2. Bonding Method

Apply the thoroughly mixed CHMA420NC to one side of either substrate.

After application, bonding, adjustment of the bonding surfaces, and application of pressure must be completed within the working time.

Once the bonded surfaces have achieved initial curing of CHMA420NC (equivalent to the setting time), the product can be packaged or further processed.

To maintain a normal curing speed, apply the adhesive between 12.7°C (55°F) and 26.7°C (80°F). Below 12.7°C, the curing speed slows down; above 26.7°C, the reaction speed speeds up. The consistency of the CHMA420NC base and hardener will change with temperature.

To maintain stable operation of the metering/mixing dispensing machine for CHMA420NC, the base and hardener must be kept at appropriate temperatures.

The maximum coating thickness should not exceed 5 mm (0.197 inches).

Shelf life:

CHMA420NC has a shelf life of 12 months from the date of manufacture when stored at 12.7°C (55°F) ~ 24°C (75°F). Prolonged storage at temperatures above 24°C will shorten the shelf life. Refrigeration at 7.2°C (45°F) ~ 12.7°C (55°F) can extend the shelf life.

The above information is for reference only. For product inquiries, please call: 0769-23026774. Cohui Adhesive

ILLUSTRATE:

The data in this article were obtained under laboratory conditions. Due to variations in usage conditions, users should refer to these data and usage conditions for their own analysis and testing. Cohui Company does not guarantee the sale of Cohui products or address problems arising from their use under specific operating conditions, and assumes no liability for any direct, indirect, or incidental losses. If users encounter any problems during use, they can contact Cohui Company's Technical Service Department, and we will provide you with all assistance.