

Quantum 197

Product Description

Quantum 197 is a low blooming and low odor cyanoacrylate adhesive, and it is specially formulated for the assembly of a variety of plastic, metal and rubbers and the gel consistency prevents adhesive flow even on vertical surfaces. It will highly polymerize with moisture in the air for a fast cure.

Product Benefits

- Rapid set time
- Low odor
- Low bloom
- Bonds variety of plastics, metals and rubbers
- Low slumping for vertical surfaces

Typical Properties (Uncured)

Property	Value
Chemical Type	2-Methoxyethyl-2-Cyanoacrylate
Appearance	Clear gel to slightly cloudy
Viscosity @ 77°F (25°C), cP	10,000 to 30,000
Specific gravity	1.1
Flash point	See SDS

Typical Properties (Cured)

Physical Properties

Property	Value
Temperature range, °C, (°F)	-55 to 100 (-65 to)

Typical Curing Performance

Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The table below shows the fixture time achieved on different materials at 22°C. Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Substrate	Fixture Time (seconds)
Mild Steel	25 to 75
Aluminum	15 to 30
Acrylonitrile butadiene styrene	20 to 40
Polyvinyl chloride	20 to 40
Polycarbonate	20 to 50
Oak Wood	45 to 60
Pine Wood	45 to 65
Beech Wood	30 to 50
Nitrile-butadiene rubber	20 to 30
Paper	<5

Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. Thin bond lines result in high cure speeds, increasing the bond gap will decrease the rate of cure.

Typical Cured Performance

Shear Strength

Cured 24 Hours @ 22°C - tested according to ASTM D1002.

Substrate	Shear Strength, N/mm ² (psi)
Steel (grit blasted)	≥13.8 (≥2000)
Aluminum	≥6.9 (≥1000)
Acrylonitrile butadiene styrene	≥6.9 (≥1000)
Polyvinyl chloride	≥6.9 (≥1000)
Polycarbonate	≥6.9 (≥1000)
Nitrile-butadiene rubber	≥0.7 (≥100)

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for Use

For best performance bond surfaces should be clean and free from grease. This product performs best in thin bond gaps (<0.05 mm).

Disassembly and Cleanup

Liquid Cyanoacrylate should not be wiped with rags or tissue. The fabric will cause polymerization and large quantities of adhesive will heat or cure causing smoke and strong irritating vapors. Always flood with excess water to clean up spill conditions.

Storage

Cyanoacrylate adhesives must be stored under refrigeration at a temperature of 40°F ± 5°F for extended shelf life. Before opening, the containers must be warmed to room temperature, otherwise, water may condense into the bottle and cause hardening of the adhesive. To prevent contamination of unused adhesive, do not return product to its original container.

Dispensing Equipment

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

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