

Technical Data Sheet

PRODUCT SPECIFICATION

20-SI

Cyanoacrylate Adhesive

Description:

This low viscosity, fast curing, single component cyanoacrylate adhesive is specially formulated for difficult to bond substrates. It is particularly suitable for joining plastic or rubber components, such as EPDM, where exceptionally rapid fixture times are required. As a solvent free, single component system, it eliminates the need for catalysts, heat or clamping. When applied as a thin film between two surfaces, exposure to atmospheric moisture triggers rapid polymerisation, producing a robust and highly durable bond.

Typical Properties of Cured/Uncured Material:

Liquid State		Cured State	
Base	Ethyl Cyanoacrylate	Colour	Clear
Colour	Clear	Specific Gravity (20°C)	1.1~1.3
Specific Gravity (20°C)	1.053~1.060	Working Temp (°C)	-55°C - 80°C
Refraction Index (nD ₂₀)	1.439	Refractive Index (nD ₂₀)	1.490
Flash Point (°C)	>80°C	Dielectric Constant (at 10MHz)	3.5
Shelf Life	12 Months	Dielectric Loss (at 10MHz)	0.067
Boiling Point (°C)	>214°C	Soluble in Acetone, Dimethyl formamide, Nitromethane, Dimethyl sulfoxide	
Viscosity (cP) at 25 °C (Brookfield LV-40Z at 8rpm)	10-30		

Bond Strength:

(Tensile strength, cured for 24 hours at 20-25°C)

Substrate	kg/cm ²	Substrate	kg/cm ²
Rigid PVC to Rigid PVC	40-60	SBR to SBR	5-10
ABS to ABS	50-70	Steel to Steel	190-210
Polycarbonate to Polycarbonate	80-120	Stainless Steel to Stainless Steel	160-180
Polystyrene to Polystyrene	30-45	Aluminium to Aluminium	170-190
Natural Rubber to Natural Rubber	5-9	Copper to Copper	150-170
Neoprene to Neoprene	5-9	Steel to Rigid PVC	50-60
NBR to NBR	2-5	Stainless to Neoprene	5-10
ABS to SBR	5-10		

Curing Performance:

There are many factors that can influence the rate of cure. These include: the types of substrates used, the condition of the surface to be bonded, the smoothness of the surface, the closeness of the surfaces and the atmospheric conditions.

Substrate	Seconds	Substrate	Seconds
ABS to ABS	4-6	NBR to NBR	2-5
Wood to Wood	>60	Stainless steel to Stainless steel	45-55
ABS to Stainless steel	50-60	ABS to NBR	3-5
NBR to Stainless steel	>60	Wood to ABS	>60

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Directions For Use:

1. Make sure the surfaces to be bonded are clean and dry. (Solvent wipe plastics, glass, rubber and acid treat metals)
2. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film after compression.
3. Press parts together and hold firmly for a few seconds. Good contact is essential. An adequate bond develops in less than one minute. (Maximum strength is achieved in 24 to 48 hours).
4. Wipe off excess adhesive from the top of the container and recap, if left uncapped, may deteriorate by contamination from moisture in the air.
5. Because the adhesive polymerises on contact with moisture surfaces, sometimes whitening will occur on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with debonder.

Handling & Storage:

Storage: Keep products in the unopened container in a cool dry location. The product is best when stored at 2 to 8°C. Temperatures less than 2°C can adversely affect product properties. Do not freeze. Keep the container tightly closed until ready for use.

Handling: Material removed from containers may be contaminated during use. Do not pour back any product to the original container. Misuse of product will void all warranties.

Precaution:

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve with appropriate debonder. Do not try to remove it forcibly.
3. If the adhesive gets into your eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
4. Keep well out of reach of children.
5. Keep adhesive in a cool dry place 20-25°C. For long-term storage, refrigeration (5°C) is recommended.

Disclaimer:

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