

Technical Data Sheet

PRODUCT SPECIFICATION

100-SI

Cyanoacrylate Adhesive

Description:

This low to medium viscosity, fast curing, single component cyanoacrylate adhesive is suitable for virtually all general bonding tasks. Specially formulated for difficult to bond substrates, its cure speed is less dependent on surface moisture than alternative cyanoacrylate grades. When applied as a thin film between two surfaces, exposure to atmospheric moisture triggers rapid polymerisation, resulting in an exceptionally strong 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 1rpm)	100-200		

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	150-190
Polycarbonate to Polycarbonate	80-120	Stainless Steel to Stainless Steel	150-180
Polystyrene to Polystyrene	30-45	Aluminium to Aluminium	140-170
Natural Rubber to Natural Rubber	5-9	Copper to Copper	130-150
Neoprene to Neoprene	5-9	Steel to Rigid PVC	50-60
NBR to NBR	5-9	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	4-8	NBR to NBR	2-5
Wood to Wood	50-60	Stainless steel to Stainless steel	50-70
ABS to Stainless steel	50-70	ABS to NBR	2-5
NBR to Stainless steel	50-70	Wood to ABS	20-30

Technical Data Sheet

PRODUCT SPECIFICATION

100-SI

Cyanoacrylate Adhesive

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:

The data contained herein are furnished for informational purposes only and are believed to be reliable. However, The company does not assume responsibility for any results obtained by persons over whose methods The company has no control. It is the user's responsibility to determine the suitability of The company products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any The company products. The company specifically disclaims all warranties express or implied, including warranties of saleability and suitability for a particular purpose arising from sale or use of The company products. The company further disclaims any liability for consequential or incremental damages of any kind including lost profits.