

Technical Data Sheet

PRODUCT SPECIFICATION

1500-SI

Cyanoacrylate Adhesive

Description:

This general industrial grade cyanoacrylate adhesive is engineered to achieve maximum bond strength between close fitting, non porous substrates, including metals, plastics and rubbers. A single component, solvent free system, it operates entirely without the need for catalysts, heat or clamping. Applying a thin film between two surfaces allows exposure to atmospheric moisture to trigger rapid polymerisation, establishing a highly durable and powerful 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)	1.49
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-52Z at 3rpm)	1200-1700		

Bond Strength:

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

Substrate	kg/cm ²
Steel to Steel	190-210
Stainless Steel to Stainless Steel	250-450
Aluminium to Aluminium	170-190
Copper to Copper	150-170
PVC to PVC	40-60
ABS to ABS	50-70
Polycarbonate to Polycarbonate	80-120
Polystyrene	30-45
NBR to NBR	5-9
SBR 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
Steel to Steel	10-30
Stainless Steel to Stainless Steel	20-70
Aluminium to Aluminium	10-20
Zinc Plated to Zinc Plated	20-70
ABS to ABS	10-30
ABS to NBR	5-10
ABS to Wood	5-10
NBR to NBR	3-10
Polycarbonate	10-40

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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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