

# Technical Data Sheet

## PRODUCT SPECIFICATION

### 300-GP

#### Cyanoacrylate Adhesive

#### Description:

ormulated with a medium to high viscosity, this cyanoacrylate adhesive is exceptionally well suited for filling and bridging larger bond gaps. As a single component, solvent free system, it requires no catalyst, heat or clamping during application. When applied as a thin film between two surfaces, exposure to atmospheric moisture initiates rapid polymerisation, delivering 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 <sub>20</sub> )                    | 1.439               | Refractive Index (nD <sub>20</sub> )                                     | 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<br>(Brookfield LV-52Z at 12rpm) | 300-500             |                                                                          |              |

#### Bond Strength:

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

| Substrate                        | kg/cm <sup>2</sup> | Substrate                          | kg/cm <sup>2</sup> |
|----------------------------------|--------------------|------------------------------------|--------------------|
| Rigid PVC to Rigid PVC           | 50-70              | SBR to SBR                         | 5-10               |
| ABS to ABS                       | 50-70              | Steel to Steel                     | 200-220            |
| Polycarbonate to Polycarbonate   | 70-120             | Stainless Steel to Stainless Steel | 200-220            |
| Polystyrene to Polystyrene       | 40-45              | Aluminium to Aluminium             | 170-190            |
| Natural Rubber to Natural Rubber | 5-10               | Copper to Copper                   | 150-170            |
| Neoprene to Neoprene             | 5-10               | Steel to Rigid PVC                 | 50-60              |
| NBR to NBR                       | 5-10               | 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             | 10-12   | NBR to NBR                         | 3-5     |
| Wood to Wood           | >60     | Stainless steel to Stainless steel | 20-25   |
| ABS to Stainless steel | 9-10    | ABS to NBR                         | 3-5     |
| NBR to Stainless steel | 9-10    | Wood to ABS                        | 30-35   |

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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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