

CYNO 2000

Toughened Cyanoacrylate Adhesive

PRODUCT DESCRIPTION

Delta Cyno 2000 Tough Black is a high performance, cyanoacrylate based, rubber toughened adhesive. The unique formulation gives a cured adhesive film with enhanced properties such as increased flexibility and shock resistance. The product, although showing improved flexibility, still retains the high levels of bond strength exhibited by all the Delta high technology adhesive range.

AREA OF USE

A multitude of industrial and professional uses whenever a strong bond is required coupled with improved flexibility on substrates such as metals, plastics and rubbers. For best performance bond surfaces should be clean and free from dust, the use of Delta Cleaning Wipes is recommended.

TECHNICAL DATA

UNCURED MATERIAL PROPERTIES

Adhesive Type:	Cyanoacrylate
Chemical Classification:	Ethyl-2-cyanoacrylate monomer
Flashpoint:	>81°C
Specific Gravity @ 25°C:	1.05 g/cm ³
Appearance:	Black polymer liquid
Components:	One part moisture cure system
Form:	Homogeneous ready to use
Viscosity@25°C: (Brookfield RV spindle 1 20rpm)	3000 - 4000 cP (mPa s)
Softening Point:	130°C
Full cure time:	24 hours

CURING PROPERTIES

Bond width:	The rate of cure will depend on the bond width. Larger bond width will lead to slower cure rates.
Gap fill:	0.30 mm
Full Cure:	The full curing process should be complete after 24 hours under standard conditions.

TECHNICAL DATA cont...

Cure speeds: The rate of cure varies with levels of ambient relative humidity.

Typical speeds (time to achieve 0.1 N/mm² as determined by ISO 4587)

Balsa wood	20 seconds
Nitrile rubber	10 seconds
EPDM	10 seconds
Neoprene	10 seconds
Steel (degreased)	20-35 seconds
Polycarbonate	25-35 seconds

CURED MATERIAL PROPERTIES

Hardness (Rockwell): M58
Solubility: DMF, Acetone, Acetonitrile

Shear strength:
ISO 4587

Steel (grit blasted)	>15 N/mm ²
Aluminium (grit blasted)	>10 N/mm ²
Polycarbonate	> 6 N/mm ²
Nitrile Rubber	>10 N/mm ²

Tensile Strength:
ASTM D412 (B)

Steel (grit based)	>18 N/mm ²
Nitrile Rubber	> 5 N/mm ²
EPDM	> 5 N/mm ²
Neoprene	>2.5N/mm ²

STORAGE AND SHELF LIFE

Ideal storage temperature: 10-20°C

Container: Store in original packaging

Shelf life: 6 months

HEALTH AND SAFETY

Classification: Xi IRRITANT

Bonds skin and eyes in seconds. Keep out of reach of children. Refer to product Material Safety Data Sheet (MSDS)

LEGAL NOTE

The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Delta Adhesives Ltd accepts no liability arising out of the use of this information or the products described herein.

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