

TECHNICAL DATA SHEET EDITION: 12/10/07 PRODUCT CODE: CYNO 2000

> CYNO 2000 Toughened Cyanoacrylate Adhesive

**PRODUCT**<br/>**DESCRIPTION**Delta Cyno 2000 Tough Black is a high performance,<br/>cyanoacrylate based, rubber toughened adhesive. The<br/>unique formulation gives a cured adhesive film with<br/>enhanced properties such as increased flexibility and<br/>shock resistance. The product, although showing<br/>improved flexibility, still retains the high levels of bond<br/>strength exhibited by all the Delta high technology adhesive<br/>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: Chemical Classification: Flashpoint: Specific Gavity @ 25°C: Appearance: Components: Form: Viscosity@25°C: (Brookfield RV spindle 1 20rpm) Softening Point: Full cure time:

CURING PROPERTIES

Bond width:

Gap fill:

Full Cure:

Cyanoacrylate Ethyl-2-cyanoacrylate monomer >81°C 1.05 g/cm<sup>3</sup> Black polymer liquid One part moisture cure system Homogeneous ready to use

300-500 cP (mPa s) 130°C 24 hours

The rate of cure will depend on the bond width. Larger bond width will lead to slower cure rates. 0.30 mm

The full curing process should be complete after 24 hours under standard conditions.



SYANOAGRYLATE

## **TECHNICAL DATA cont...**

Cure speeds:

The rate of cure varies with levels of ambient relative humidity.

20 seconds

10 seconds

10 seconds

10 seconds 20-35 seconds

M58

25-35 seconds

DMF, Acetone, Acetonitrile

Typical speeds (time to achieve 0.1 N/mm<sup>2</sup> as determined by ISO 4587)

Balsa wood Nitrile rubber EPDM Neoprene Steel (degreased) Polycarbonate

Hardness (Rockwell): Solubility:

Shear strength: ISO 4587

Steel (grit blasted)>15 N/mm²Aluminium (grit blasted)>10 N/mm²Polycarbonate> 6 N/mm²Nitrile Rubber>10 N/mm²

Tensile Strength: ASTM D412 (B)

Steel (grit based)>18 N/mm²Nitrile Rubber> 5 N/mm²EPDM> 5 N/mm²Neoprene>2.5N/mm²

STORAGE	AND	SHELF	
LIFE			

Ideal storage temperature: 10-20°C

Container:

Store in original packaging

Shelf life:

6 months

CURED MATERIAL PROPERTIES



HEALTH AND SAFETY	Classification:	Xi IRRITANT
	, <u>,</u>	econds. Keep out of reach of ct Material Safety Data Sheet
LEGAL NOTE	furnished for information reliable at the time of responsibility for results of methods we have no contr	n this Technical Data Sheet is only and is believed to be issue. We cannot assume obtained by others over whose rol. It is the responsibility of the ne products suitability for use.

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