



# TRULOC Technical Data Sheet

## Superset 53

Dated : 15.07.2009

Truloc Ltd  
9 Maxted Road  
HEMEL HEMPSTEAD  
HP2 7DX  
Tel: +44(0) 1442244205  
Fax: +44(0) 1442248292

### **Product Description**

Truloc Superset 53 is a medium viscosity, ethyl based cyanoacrylate adhesive. Superset 53 is designed for the rapid bonding of plastics and rubbers. It features extremely fast fixturing times and good weathering resistance. It is ideal for bonding models and toys, emblems, plastic knobs and insulating trim.

### **Typical Applications**

Magnet bonding  
Bonding of loudspeaker parts  
Steel and PVC instrument bonding  
Plastic fans to plastic motor housings  
Bonding of ceramics  
Metal sleeves to rubber collars  
General bonding where fast setting and small gap fill is required

### **Product Benefits**

One part adhesive - no mixing  
Eliminates many mechanical fasteners  
Replaces slower curing adhesives  
Replaces expensive jigs and fixtures.

### **Fixturing**

Fixturing time is defined as the time after part assembly when the joint has developed a tensile shear strength of 0.1 N/mm<sup>2</sup> measured 22°C. The relative humidity of the surrounding atmosphere can greatly affect the speed of cure of cyanoacrylate. The relative humidity best suited for bonding with cyanoacrylate adhesive Superset 53 is between 40% and 60%.

### **Performance of cured Superset 53**

Shear strength, ASTM D1002 in N/mm<sup>2</sup>

Steel (degreased)	17-26
Etched Aluminium (degreased)	11-18
ABS	6-19
Polycarbonate	5-20
Nitrile rubber	5-15
Neoprene Rubber	5-15

### **Typical Properties of uncured material**

Monomer	Ethyl cyanoacrylate
Appearance	Clear liquid
Viscosity	120 cps
Toxicity	Non toxic
Flash point (coc)	85°C
Shelflife	Minimum 1 year stored at 5-25°C
Specific gravity 25° C	1.05

### **Physical properties of cured material**

Full strength achieved after 12 hours at 22°C on most surfaces	
Recommended gap	0.05
Maximum gap	0.1
Softening point ° C	170



### **Solvent Resistance**

Excellent solvent resistance to Kerosene, ethylene glycol, Hcl and water. Even after two weeks immersion at 20 degrees centigrade, the bonds on aluminium lapshears retained from 85-90% of their original strength.

### **Activators**

To increase rate of cure or for extremely inactive surfaces use Truloc Activator 171.

### **Surface Preparation**

A solvent wipe is usually sufficient for most surfaces. Optimum performance can be achieved on lightly sanded plastics and grit blasted metals.

### **Aluminium Preparation**

Most aluminium has a natural oxide coating or an electrochemically produced anodic coating. This can be abraded and then solvent cleaned or as an alternative, chemically etched.

### **Application**

Optimum results can be achieved by applying a small amount to one surface. Mate the surfaces to be bonded, then hold firmly using enough pressure to bring parts close together. Superset cyanoacrylate adhesive must be applied sparingly to give high cure speed coupled with high bond strength.

### **Caution**

Contains cynaoacrylate ester. Bonds immediately in contact with skin tissue and is an eye irritant. Bonded skin should be peeled and not pulled apart. Flush well with water. Seek medical attention for eye or internal contact. Use with adequate ventilation and keep away from children.



IRRITANT

Note the information given in this data sheet is the result of controlled laboratory tests and experience. It is intended only as a guide to the user in selecting the appropriate grade of Truloc adhesive. Users must satisfy themselves by appropriate tests that the grades they propose to use are suitable for their specific application. Truloc Ltd. are not responsible for loss, claim or damages resulting from the use of their products.

Truloc Ltd  
9 Maxted Road  
HEMEL HEMPSTEAD  
HP2 7DX  
Tel: +44(0) 1442244205  
Fax: +44(0) 1442248292