

### Technical Data Sheet

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Weicon VA 250 Black is a professional-quality super glue that has been developed to meet the needs of industrial applications. This specialised glue works with a wide selection of materials and creates high strength bonds with high peel and impact strength.

Where VA 250 really shines is in its suitability for specialised applications. Like our VA 30 Black, VA 250 is a rubber-filled super glue which gives it its black colouring. The rubber is for much more than aesthetics, it also helps give this glue excellent residual elasticity and humidity resistance.



**View This Product** 

Typical super glues cure to form a fairly rigid adhesive.

VA 250 is a little different as the rubber compound used in its formulation enables a slightly higher tolerance of joint movement.

VA 250 Black is a thick, viscous cyanoacrylate that has an extended cure time. Exact figures will vary a little depending on the materials being bonded (and conditions) but you can expect around 40 – 80 seconds when bonding rigid PVC. This makes it ideal for high accuracy bonding.

## **Applications**

- Bonding of different rubber materials such as Neoprene, Natural, Nitrile.
- Making high strength rubber O Rings from rubber O Ring Cord.
- Securing rubber sponge and foam.
- Making metal to plastic and plastic to plastic joins.
- Bonding leather and other slightly porous materials.
- Creating high temperature resistant bonds.
- Bonding and gluing for applications that require good humidity resistance.

#### **Technical Details**

#### General Surface Compatibility

Metal	+
Plastic*	++
Rubber	++
EPDM Elastomers	+
Wood	+
Balsa-Wood	+
Glass / Ceramic	+
Leather	+

++ = Highly Compatible + = Compatible - = Not Compatible \*Performance will vary depending on the exact type of plastic being bonded. Generally, low surface energy plastics will be much harder to bond to then high surface energy (such as rigid PVC).



# Weicon VA 250 Black High Viscosity, High Heat Rubber Filled Super Glue

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#### **Properties**

Ester Type	pe	Ethyl
Condition / Nature		Black Liquid
Viscosity at 20°C Brookfield		2,000-3,000 MPa
Maximum Gap Covering		0.2mm
Power**		0.211111
Specific Gravity at 20°C		
Flash Point According To		
	nsky DIN 55213	
Initial Adhesion on Aluminium*		90-120 Seconds
Initial Adhesion on		20-40 Seconds
Nora Test Rubber*		20-40 Seconds
Initial Adhesion on Rigid PVC*		40-80 Seconds
Final Strength After		24 Hours
Shear Strength Acc. To DIN 53283	Sand-Blasted Steel	24 N/mm <sup>2</sup>
	Sand-Blasted	18 N/mm²
	Aluminium	
	Rigid PVC	13 N/mm <sup>2</sup>
	ABS	12 N/mm <sup>2</sup>
	PC	13 N/mm <sup>2</sup>
	NBR	>8 N/mm² (bonding exceeds
		strength of substrate)
Temperature Resistance		-50°C to +140°C
Squatting Temperature		+160°C

#### **Preparation of the Surface**

To achieve the best possible results, the surfaces being bonded must be clean and dry. Smooth surfaces should be roughened whenever possible (e.g. by sanding) as this increases the available surface area for the adhesive to bond with.

To improve the adhesion on difficult to bond plastics (e.g. PE, PP, POM, PTFE), thermoplastic elastomers (TPE) and Silicone, WEICON CA-Primer can be applied on the surface.

### **Application**

Apply Weicon VA 250 Black Rubber Filled Super Glue to one of the surfaces being joined. The bond line (or gap between the parts being bonded) should be between 0.05mm and 0.2mm. Outside of this, complete curing may not be achieved.

If bonding larger surface areas, Weicon Super Glues should be applied drop by drop to minimise the risk of inner tension of the adhesive. All of these glues are very economical as a single drop is sufficient for covering about 3-5cm<sup>2</sup> of surface area.

VA 250 should be used in an environment with 40-80% relative humidity if at all possible. In conditions below 40%, the cure will be substantially slowed or even inhibited. With a relative humidity greater than 80%, of when bonding basic substrates such as glass, shock-curing can occur. In such situations, some materials exhibit a drop in bond strength of approximately 10-15% due to inner tensions created in the bonding line.

Basic reacting surfaces (with pH values >7) will cure faster while acidic reacting surfaces will slow, and under certain conditions, completely inhibit polymerisation.



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Physiological properties / health and safety

Physiologically, all Weicon Cyanoacrylate Adhesives may be considered essentially harmless. However, it is prudent to ensure that there is sufficient ventilation of work areas to cope with vapours released by the adhesive. Vapours released from contact adhesives may cause irritation to mucus membranes and the eyes. Avoid contact with skin and eyes (wear gloves and protective goggles). The use of Weicon Hand Protective Foam will also assist with preventing skin irritation and hand cleaning problems. For more information on this topic, please refer to the appropriate SDS.

## **Storage**

Weicon VA 250 Black Rubber Filled Super Glue should always be stored in a cool, dry and dark area. The shelf life is at least 9 months if stored at room temperature. If stored at 5°C (in a refrigerator) the shelf life can be extended to over 12 months.

## **Availability**

Weicon VA 250 Black Rubber Filled Super Glue is available from Swift Supplies in 12gm, 30gm and 60gm Pens. 500ml Bottles are also available.

These pens are a unique feature of our Weicon Adhesive range that allows for natural, accurate and easy application of the adhesive.

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