

#### **Technical Data Sheet**

swiftsupplies.com.au

Weicon Plastic Repair Sticks are specially designed for making fast and permanent repairs to different kinds of plastic and metal components. Manufactured in Germany from Plastic filled Epoxy Resin, Plastic Repair Stick has an extended pot life (20 min.) and is NSF approved for food and potable water applications.

Out of the tube, Plastic Repair Sticks are soft, pliable and easy to mix and shape by kneading in your hands. Once applied, they'll bond with high adhesive strength and cure to form a solid mass that will be light blue in colour. Weicon Repair Sticks require no special tools; just cut off the amount you want from the tube, knead and apply.



### **Applications**

- Fixing cracks, leaks and holes in plastic pipes and elbows
- Fixing filling and packing machines used in food preparation
- Repairing and sealing fittings and flanges
- Repairs in the marine sector
- Fixing leaks on drinking water pipes and tanks
- Sealing and filling gaps around windows and doors
- Repair, crack filling and hole filling for plastic parts and components
- Repairs to bumpers
- Repairs to metals, plastics, ceramic surfaces, glass, stone, bricks, wood and more

### **Preparation of the Surface**

To ensure that the Plastic Repair Stick bonds well and achieves its full potential it is very important that you ensure the surface to which it will be applied is clean and dry. Adhesion to very smooth surfaces will be enhanced if you are able to roughen the surface slightly before applying the repair stick as this will increase the available bonding area. Just make sure you clean away any dust generated by this roughening if you do.

#### **Application**

Remove the putty from the tube and cut off the amount you want to use. Mix the cut off portion by kneading it until it has a single, homogenous colour to it.

Weicon Plastic Repair Sticks can cover gaps up to 15mm in size. Pot life starts once you mix portion together. For this grade, you can expect an extended pot life of about 20 minutes if you mix 25 grams or putty at room temperature. If larger quantities are used, the curing time will be faster due to the typical reaction heat of epoxy resins (exothermic reaction). Similarly, higher ambient temperatures shorten the cure time (as a rule of thumb, every 10°C increase above room temperature will halve working time and cure time). Temperatures below +16°C will extend working time and cure time considerably while below around +5°C no reaction will occur.

Physiological properties / health and safety at work

Weicon Repair Sticks, when properly handled and completely cured, are toxicologically harmless. When using these adhesives, the physical, safety, technical, toxicological and ecological data and regulations in the SDS must be observed.

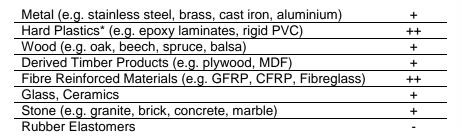


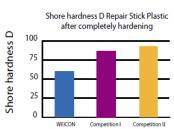
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#### **Technical Details**

## **General Surface Compatibility**





++ = 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).

#### **Properties**

Basis	Epoxy Resin with Plastic Fillers
Nature	Putty
Density	1.6 g/cm <sup>3</sup>
Maximum Gap Covering	
Power**	miner
Pot Life for 25g of Material	20 Minutes
@ 20°C	20 Millutes
Processing Temperature	+10°C to +40°C
Curing Temperature	+6°C to +40°C
Colour After Curing	Light Blue
Handling Strength	
(35% of Final) When Curing	40 Minutes
@ 20°C	
Mechanical Strength	
(50% of Final) When Curing	3 Hour2
@ 20°C	
Final Strength (100%)	36 Hours
When Curing @ 20°C	30 1 10013
Temperature Resistance	-50°C to +120°C
(Continuous)	00 0 10 1120 0
Temperature Resistance	+150°C
(Short-Term, 2 Hours Max.)	
Pressure (DIN 52381-83)	65 N/mm²
Shore Hardness	65 Shore D
Average Tensile Shear Strength	2.4 N/mm² on
After 7 Days at 20°C	Roughened PVC
(as per DIN 52383)	
Thermal Conductivity	0.4 W/m·K
(ASTM D527)	
Linear Shrinkage While Curing	<1%
Electrical Resistance	5 · 10 <sup>11</sup> Ω/cm
(ASTM D257)	0 10 12/0111
Dielectric Strength	3 kV/mm
(ASTM D149)	C RV/IIIII
Thermal Expansion Coefficient	30-40 x 10- <sup>6</sup> k-1
(ISO 11359)	00 10 X 10 K 1



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# **Weicon Plastic Repair Stick Chemical Resistance**

Acetic Acid Dilute (<5%)	+
Acetone	0
Alkalis (Basic Minerals)	+
Amyl Acetate	+
Amyl Alcohols	+
Anhydrous Ammonia (25%)	+
Barium Hydroxide	+
Butyl Acetate	+
Butyl Alcohol	+
Calcium Hydroxide (slaked lime)	+
Carbolic Acid (Phenol)	
Carbon Disulphide	+
Carbon Tetrachloride	+
Caustic Potash Solution	+
Chlorinated Water	+
Chloroacetic Acid	
Chloroform	0
Chromic Acid	+
Chroming Baths	+
Creosote Oil	-
Cresylic Acid	
Crude Oil	+
Crude Oil Products	+
Diesel Fuel Oil	+
Ethanol < 85% (Ethyl Alcohol)	0
Ethyl Alcohol	0
Ethyl Benzole	
Ethyl Ether	+
Exhaust Gases	+
Formic Acid (>10%)	-
Glycerine	+
Glycol	0
Grease, Oils and Waxes	+
Heating Oil, Diesel	+
Humic Acid	+
Hydrobromic Acid (<10%)	+
Hydrocarbons (Aliphatic)	+
Hydrocarbons (Aromatic)	-

Hydrochloric Acid (<10%)	+
Hydrochloric Acid (10-20%)	+
Hydrofluoric Acid Dilute	0
Hydrogen Peroxide (<30%)	+
Impregnating Oils	+
Magnesium Hydroxide	+
Maleic Acid	+
Methanol (Methyl Alcohol, <85%)	0
Milk of Lime	+
Naphthalene	-
Naphthene	-
Nitric Acid (<5%)	0
Oils, Vegetable and Animal	+
Oxalic Acid (<25%)	+
Paraffin	+
Perchloroethylene	0
Petrol (92-100 Octane)	+
Phosphoric Acid (<5%)	+
Phthalic Acid	+
Phthalic Acid Anhydride	+
Potassium Hydroxide	
(Caustic Potash, 0-20%)	+
Soda Lye	+
Sodium Bicarbonate	
(Sodium Hydrogen Carbonate)	+
Sodium Carbonate (Soda)	+
Sodium Chloride (Cooking Salt)	+
Sodium Hydroxide	0
(Caustic Soda, <20%)	
Sulphur Dioxide	+
Sulphuric Acid (<5%)	0
Tannic Acid Dilute (<7%)	+
Tetralin	0
Toulene	-
Trichloroethylene	0
Turpenetine Substitute (White Spirit)	+
Xylene	-

+ = Resistant

O = Resistant for a Limited Time

- = Not Resistant

## **Storage**

When stored unopened and in normal climatic conditions (20°C) Weicon Plastic Repair Stick has a minimum shelf-life of 18 months. Storage in direct sunlight should be avoided.

## **Available Sizes**

Weicon Plastic Repair Sticks are available from Swift Supplies in 57gm and 115gm tubes.