

## S1010 – Technical Data Sheet



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### Description

**S1010** is a hand-kneadable, non-rusting, steel-reinforced epoxy putty that mixes in one minute to provide fast, permanent repairs to items made of ferrous and aluminium metals. Steel stick also bonds to wood, glass, masonry, and many plastics. **S1010 Steel Stick** has WRAS approval, meaning it is certified as safe to use on pipes and fittings carrying drinking water.

**S1010** comes in a handy rod form with the curing agent encapsulated in the contrasting colour base material. Its putty-like consistency eliminates drips and runs, providing “no mess” application with no tools required to use. **S1010** is dark grey metallic in colour after use. Once cured, it can be tapped, drilled, screwed, sawed, machined, ground, filed, or painted, and does not rust.

After proper mixing, **S1010** moulds like clay and may be used in many industrial and home maintenance applications, it is suitable for interior or exterior use, it is resistant to water, chemicals, and temperature extremes. **S1010 Steel Stick** contains no solvents or VOC's. It is non-flammable and releases no noxious fumes. It will not shrink or pull away.

The unused portion of **S1010** will remain stable for years if protected from direct contact with the air, in cool conditions.

### Technical Data

|                       |   |
|-----------------------|---|
| Density               | 2.1 gm/cm <sup>3</sup>  |
| Resistance            | Hydrocarbons, ketones, esters, halo-carbons, alcohols, aqueous salt solutions and dilute acids and bases. |
| Electrical Resistance | 30,000 mega Ohms Dielectric   |
| Dielectric Strength   | 300 Volts/mil   |
| Shrinkage             | <1%   |
| Non-volatile content  | 100%  |
| Shelf life            | >18 months @ 24°C   |
| Approvals             | WRAS  |

### Directions for Use

#### Mixing

Twist or cut off required amount. To mix, knead with fingers to a uniformed colour. If mixing is difficult, warm to room temperature or slightly above. Apply to the surface to be repaired (within 3 minutes of mixing). The mixed epoxy does not exhibit high bond strength at this point, but appears to be merely lying on the surface. Force into any cracks or holes to be filled and strike off excess material, preferably with a tool wetted with clean water. When applying to a damp, wet or slowly leaking area, Work the material forcefully into the surface and apply pressure until adhesion begins to take effect.

For a smooth appearance of the cured compound, hand rub with water or a damp cloth prior to hardening.

#### Hardening

Remove excess material before hardening begins. After 5-10 minutes, the epoxy will harden and start to form a cohesive bond. After just 60 minutes, it is completely cured and can be drilled, sawed, carved, sanded, stained or painted.

In order to achieve optimum adhesion, surface should be cleaned free of grease or dirt. Scuffing or sanding the surface prior to cleaning helps to ensure a good bond.

### Cure Performance

|                                   |                       |
|-----------------------------------|-----------------------|
| <b>Initial cure</b>               | 1 hour max            |
| <b>Full cure time</b>             | 24 hours              |
| <b>Lap shear strength (steel)</b> | 6.3 N/mm <sup>2</sup> |
| <b>Shore D hardness</b>           | 90                    |
| <b>Compressive strength</b>       | 90 MPa                |

### Properties

|                                    |  |
|------------------------------------|--|
| <b>Opening time</b>                | 3 minutes                              |
| <b>Max. temperature resistance</b> | 120°C continuous<br>150°C intermittent |

### Precaution

IRRITANT: Contains epoxy resin and may cause skin irritation in sensitive individuals. Wear rubber or plastic coated gloves.

Store in cool conditions, preferably away from direct sunlight or excessive heat. Shelf life at least 18 months @ 24°C.

**Please consult the S1010 Health & Safety Data Sheet for statutory regulation information.**

Information relating to the products of Bondrite Adhesive Limited is based on tests carried out under laboratory conditions. If any of our products are not used in accordance with our instructions or are used under conditions which vary from our laboratory, they may not perform in accordance with any information provided and Bondrite shall not have any liability in this case. Bondrite will accordingly provide samples of our products, on request and free of charge, for customers to carry out their own tests as to suitability of our product for their purposes and as used in their intended environment.