

Product Specification

103 METAL REPAIR STICK

103 Metal Repair Stick is a two-component repair material in stick form which cures rapidly at room temperature after mixing. It is a metal repair adhesive which develops high mechanical strength in a short period of time.

Typical applications

cracked pump or valve casings
scored hydraulic rams, worn bearing housing, damaged flanges, leaking tank seams, cracked engine blocks

Characteristics

Appearance

Base: Dark Grey putty
Activator: Black putty
Mixed: Mid grey putty

Mixing Ratio

Product supplied in stick form

Volume Capacity

55.5cc per 125gm stick

Solid's content

100%

Sag Resistance

Nil at 1" (25mm)

Cure Times

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

Usable life

50°F	10 minutes
68°F	5 minutes
86°F	2.5 minutes
104°F	1.25 minutes

Minimum machining time

50°F	1 hour
68°F	30 mins
86°F	15 mins
104°F	7.5 mins

Full Cure

50°F	2 hours
68°F	1 hour
86°F	30 minutes
104°F	15 minutes

Storage life

5 years if unopened and stored in normal dry conditions
60-86°F

Mechanical Properties

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 3-mil profile.
2630 psi (185 kg/cm²)

Pull off Adhesion to ASTM D4541 on mechanically prepared mild steel to ST2 surface cleanliness
1780 psi (125kg/cm²)

Compressive strength

Tested to ASTM D695
12,000psi (843kg/cm²)

Flexural Strength

Tested to ASTM D790
6470psi (455kg/cm²)

Hardness

Rockwell R to ASTM D785 92

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 122°F.
Resistant to dry heat up to 302°F dependent on load.

Food Contact

USDA compliant for incidental food contact.

Chemical Resistance

The product resists attack by a wide variety of inorganic acids, alkalis, salts and organic media. For more detailed information refer to the PES Technical Center for advice.

Quality

All PES Products are supplied under the scope of the company's fully documented quality system.

Warranty

PES warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

Health and safety

Please ensure good practice is always observed during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read and fully understood the detailed Material Safety Data Sheet.

Notice: The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. PES accepts no liability arising out of the use of this information or the product described herein.