

# **Product Specification**

# 105 AQUA STICK

105 Aqua Stick is a twocomponent repair material in stick form which cures underwater after mixing. It is a metal repair adhesive which develops high mechanical strength in a short period of time.

# **Typical applications**

Suitable for repairs to concrete and metallic surfaces underwater.

# Characteristics Appearance

Base: Green putty
Activator: Cream putty
Mixed: Light green putty

### Mixing Ratio

Product supplied in stick form

## **Volume Capacity**

55.5cc per 125gm stick

### Solids 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 30 minutes 68°F 15 minutes 86°F 7.5 minutes 104°F 3.5 minutes

### Minimum machining time

50°F 1.5 hour 68°F 45 mins 86°F 22.5 mins 104°F 11 mins

### **Full Cure**

50°F 3 hours 68°F 90 mins 86°F 45 minutes 104°F 22.5 minutes

**Storage life** 5 years if unopened and stored in normal dry conditions (59-86°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

### 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.

Legal 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.

Polymeric Engineered Solutions 5401 HWY 21 West, Bryan TX 77803 Phone: (979) 779-8700 Email: pes1@pes-solutions.com Web: pes-solutions.com