

## Introduction

Seal Stic<sup>®</sup> SS106 Underwater Epoxy Stick is a two component speciality epoxy putty stick which is ease to mix by hand. Use for permanent repairs to various substrates.

#### **Features**

- Pre-mixed ceramic-based formulation
- Suitable for moist and wet conditions
- Excellent resistance to oil and chemicals
- Bonds to metallic and non-metallic surfaces
- Can be drilled, tapped, machined or painted
- Non-toxic and solvent-free

# **Typical Applications**

- Repairing tanks, drums and containers
- Patching holes and gouges in pipes
- Repairing porosity holes in castings

## **Typical Properties**

Colour	Light yellow
Mix ratio by volume	N/A
Mix ratio by weight	N/A
% solids by volume	100
Pot life at 25°C / mins	10
Specific volume CC/Kg	526
Cured shrinkage cm/cm	N/A
Specific gravity	1.90
Temperature resistance / °C	Wet 49°C Dry 121°C
Temperature range / °C	-50°C to 120°C
Coverage	1053cm <sup>2</sup> /Kg @ 5mm
Cured hardness / Shore D	80
Dielectric strength KV/mm	12
Compressive strength / psi	12000
Tensile strength / psi	6000
Shear strength / psi	900
Coefficient of thermal expansion	N/A
x10 <sup>-6</sup> cm/cm/°C	
Thickness per coat / mm	As Required
Min. curing time before function /	20
mins	
Recoat time / Hours	N/A
Mixed viscosity / cps (where	Putty
applicable)	

#### **Direction for Use**

# **Surface Preparation**

Proper surface preparation is essential to a successful application. The following procedures should be considered:

- If surface is oily or greasy, degrease the surface.
- Remove all paint, rust and grime from the surface by abrasive blasting or other mechanical techniques.
- Provide a "profile" on the metal surface by roughening the surface.

- This should be done ideally by grit blasting (8-40 mesh grit), or by grinding with a coarse wheel or abrasive disc pad. An abrasive disc may be used provided white metal is revealed. Do not 'feather edge' epoxy materials. Epoxy material must be 'locked in' by defined edges and a good 3 5 mil profile.
- Metal that has been handling sea water or other salt solutions should be grit blasted and high pressure water blasted and left overnight to allow any salts in the metal to 'sweat' to the surface. Repeat blasting may be required to 'sweat out' all the soluble salts. A test for chloride contamination should be performed prior to any epoxy application. The maximum soluble salts left on the substrate should be no more than 40 p.p.m. (parts per million).
- Under cold working conditions, heating the repair area to 38°C - 43°C immediately before applying Seal Stic® SS106 Underwater Epoxy Stick is recommended. This procedure dries off any moisture, contamination or solvents and assists the epoxy in achieving maximum adhesion to the substrate.
- All prepared surfaces should be repaired as soon as possible, to eliminate any changes or surface contaminants.

#### Mixing

Simply twist or cut off the required amount for the repair from stick. Knead the putty with your fingers until the colour is uniform.

## **Application**

Apply the mixed epoxy to the surface to be repaired within 2 minutes of mixing. The mixed epoxy does not show much bond strength at this time, and can be kneaded or formed into any cracks or holes to be filled. When applying to a damp, wet surface or slow leaking area, work the material forcefully into the surface until the exothermic process starts and adhesion strength starts.

## **Safety and Handling Consideration**

Keep away from children.

Avoid contact with skin and eyes. Wear proper protective equipment.

In case of contact with eyes or skin, rinse with clean water immediately; if symptom goes on, call a physical attention.

More details, please refer to MSDS of this product

#### **Recommended Storage:**

Stored in a cool and dry location in unopened containers at  $8{\sim}28^{\circ}\text{C}.$ 

Shelf life: 12 months

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