



## STAINLESS STEEL PUTTY (ST)

### PRODUCT DATA SHEET

Stainless Steel Putty is a stainless steel filled, room temperature cured, epoxy for rebuilding and repairing stainless steel equipment. Makes non-rusting repairs in dairies, food processing and chemical plants.

- Chemically accepted for use in USDA inspected plants.
- Bonds to ferrous and non-ferrous metals and concrete
- Conventional metalworking tools can be used to drill, tap or grind stainless steel putty repairs.
- Excellent chemical resistance
- Has FDA approval

#### RECOMMENDED APPLICATIONS:

- Repairs cracks, dents and breaks in equipment, machinery or castings.
- Rebuilds parts sand equipment
- Rebuilds shafts, trays and chutes
- Food processing equipment repairs
- Certified for potable water applications

#### PRODUCT DATA Typical Properties

Colour.....	Grey
Mixed Consistency.....	Putty
Pot life @ 21° C.....	45 minutes
Adhesive tensile shear.....	21 N/mm <sup>2</sup>
Compressive strength.....	61 N/mm <sup>2</sup>
Operating temperature .....	121° C
Cured hardness, shore D.....	85D
Specific volume.....	447cm <sup>3</sup> /kg
Coverage cm <sup>2</sup> /kg @ 6.35mm.....	700
Dielectric strength volt/mil.....	30
Cure shrinkage cm/cm.....	0.0010
Mix ratio.....wt	9.0:1
.....vol	3.0:1

#### CHEMICAL RESISTANCE: 7 days room temperature cure (30 days immersion @24° C)

Kerosene	Very Good	Methanol	Unsatisfactory
Hydrochloric Acid	Fair	Toluene	Very Good
Chlorinated solvent	Very Good	Ammonia	Very Good
Sulphuric acid 10%	Very Good	Sodium Hydroxide 10%	Unsatisfactory

Epoxyes are very good in water, saturated salt solution, leaded gasoline, mineral spirits, ASTM #3 oil and propylene glycol. Epoxyes are generally not recommended for long term exposure to concentrated acids and organic solvents



## **APPLICATION INFORMATION:**

### **Surface applications**

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

- First, degrease the surface by using any one of Devcon's Industrial Cleaners. Oil, grease and dirt must be removed before applying any epoxy material.
- All surfaces must be thoroughly roughened 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. This creates increased surface area for better adhesion. A 3-5 mil profile is desired for an application. 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 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).
- All abrasive preparation should be followed by chemical cleaning with any of Devcon's Industrial Cleaners. This will help to remove all traces of sandblasting, grit, oil, grease, dust or other foreign substances.
- Under cold working conditions, heating the repair area to 38°C - 43° C immediately before applying any of Devcon's Metal-filled Epoxies 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:** Mix ratio = weight 11:1, volume 3.75:1

Add hardener to resin. Mix thoroughly with a screwdriver or similar tool until a uniform, streak-free consistency is obtained, about 4 minutes. Be sure to mix material from bottom and sides of container. It is strongly recommended that full can units be mixed.

### **APPLICATION :**

For best results, product should be kept and applied at room temperature. Stainless Steel Putty can be applied when temperatures are between 13° C and 32° C. When temperatures are below 21° C cure and pot life will be longer , and above room temperature, cure and pot life will be shorter. Spread Stainless Steel Putty over prepared surface with applicator (enclosed) or putty knife. Press firmly to ensure maximum surface contact and avoid entrapping air. To bridge large gaps or holes use fibreglass, expanded metal or other mechanical fasteners.

### **CURE:**

A 12.7mm thick section of Devcon Epoxy will harden at 24° C in 4 hours. The material will be fully cured in 16 hours. The actual cure time of epoxy is determined by the size of the mass of epoxy and the temperature.

### **PRECAUTION**

For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product. If used in food processing, wash cured area thoroughly before food contact.

For technical assistance please call 01933 675299

### **Warranty:**

Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

### **ORDERING INFORMATION**

<u>Stock No</u>	<u>Unit size</u>
10271	500g