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**TWIN PACK EPOXY COMPOSITE**



**1 Product Description**

Pipe Shield is a burgundy colored twin pack epoxy composite. It is a thin paste and contains a propriety blend of glass and modifiers, mixed with epoxy resins and hardeners. It hardens exothermically over time to form a hard lining, for pipes where moderate impact and high corrosive and abrasive wear resistance is required. (Patent pending)

**2 Suitable for Application Inside**

Pipes where application is by spinning. All slurry lines and potable water pipes. Where the pipe line consists of pipe bends as well it is recommended that the bends be lined with AB 502 GS, as bends cannot be spun.

**3 Physical & Chemical Properties  
(Typical values)**

**Density:** 1.6 Kg / liter

**Gel time:** 30 to 40 minutes at 25°C

**Hardening time:** 4 to 7 hours

**Compressive strength:** >100 Mpa

**Adhesion (pull):** > 30 Mpa

**Impact resistance:** > 15 J

**Temperature resistance:** 150°C

**Corrosive wear resistance:** 13 000 h

**Chemical resistance:** Acids, excellent  
Alkalis, excellent  
Oxidizing agents, good  
Solvents fair

**Coëfficient of friction** 0,45

**Specific heat:** 850 J/kg°C

**Coverage:** 1m<sup>2</sup> at 6mm thickness with 9 kg

#### 4 Typical Component

**Benefits:** High corrosive and abrasive wear resistance, good impact resistance, superior bonding, low peak exotherm, light weight, BPA and urethane free. Flame retarded. Easy to apply, even curing.

#### 5 Directions for Use

**Preparation:**

Sand blast insides of the pipes with a medium fine shot. Areas must be free from oil, grease and dirt. Expanded metal can be tack welded to the surface where impact or flexing exists.

Phosphating to 20 microns, Iron or Zinc Phosphate, of critical parts to improve adhesion is optional where practical by immersion or spray on application.

**Conditions:**

The surface must be dry. Temperature of the substrate must be minimum of 15°C.

**Application:**

Mix the two parts in the ratio, 8,06 parts resin to 0,94 parts hardener by weight, using a helical coil mixer attached to a variable speed drill.

Typical application thickness is 3mm to 25mm depending on the component and end use, but most frequently at 10mm.

#### 6 Health Safety and Environment:

- Do not ingest.
- Work in a well ventilated space avoiding inhalation of fumes.
- When contact is made with the skin, wash with soap and copious amounts of water.
- Store away from strong acids and oxidizing agents.
- Do not expose to open flames.
- Do not dispose of uncured epoxy resin or hardener.
- Cured epoxy can be disposed of in normal landfills.

#### 7 Packaging:

9 kg kits consisting of 8,06 kg resin mix and 0,94 kg hardener mix, in two polyethylene containers.

### SAMPLE OF PRODUCT

