



# TECHNICAL DATA SHEET - ZIP PATCH REPAIR KIT

Revised: 05/2018

PRODUCT INFORMATION

**STOCK NO.:** 11500

PACKAGE SIZE: 1 Patch Kit

#### **DESCRIPTION**

Easy to use, fast setting patch for making permanent, waterproof field repairs.

# **RECOMMENDED APPLICATIONS**

- Repairs pipes, tanks, containers and PVC/ABS pipes
- Use on punctured container roofs, side panels and liners
- Non-structural repairs to truck and trailer bodies
- Patches machine housings
- Thin wall repairs

## **PRODUCT DATA**

## **TYPICAL PHYSICAL PROPERTIES**

COLOUR	Black
MIX RATIO BY VOLUME	N/A
MIX RATIO BY WEIGHT	N/A
% SOLIDS BY VOLUME	100
POT LIFE AT 25°C / MINS	N/A
TEMPERATURE RESISTANCE / °C	Max 120°C
CURED HARDNESS / SHORE D	70 D
ADHESIVE TENSILE SHEAR / MPA	18.3 (blasted steel)
THICKNESS PER COAT / MM	1 Ply is 190 microns
FUNCTIONAL CURE TIME / HOURS	1
MIXED VISCOSITY / CPS (WHERE APPLICABLE)	Patch



# CHEMICAL RESISTANCE - 7 DAYS ROOM TEMPERATURE CURE (30 DAYS) - TESTING CARRIED OUT 30 DAYS IMMERSION AT 21°C

	POOR	FAIR	VERY GOOD	EXCELLENT
AMMONIA			•	
CUTTING OIL			•	
ISOPROPYL ALCOHOL			•	
GASOLINE (UNLEADED)			•	
HYDROCHLORIC ACID 10%			•	
METHYL ETHYL KETONE (MEK)	•			
METHYLENE CHLORIDE	•			
SODIUM HYPOCHLORITE 5% (BLEACH)			•	
SODIUM HYDROXIDE 10%			•	
SULPHURIC ACID 10%			•	
XYLENE			•	

Excellent =  $\pm$ 1- 1% weight change, Very Good =  $\pm$ 1- 10% weight change, Fair =  $\pm$ 1- 10-20% weight change, Poor =  $\pm$ 20% weight change

#### ZIP PATCH APPROXIMATE BURST STRENGTH

**Sample A:** Control sample done of 22mm PVC pipe (Schedule 80). No holes. Pipe pressurised with cap on opposite end. Burst measured at 179 bar.

**Sample B:** A 22mm PVC pipe drilled with two 3mm holes in opposing locations. Pipe was wrapped with impregnated fibreglass 1-1/2 times providing a single layer over one hole and a double layer over the second hole. Burst measured at 172 bar

**Sample C:** A 22mm PVC pipe cut with hacksaw blade to make 22mm opening. Patched with double wrap of impregnated fibreglass. Burst measured at 96.5 bar.

**NOTE:** Tests were done with hand operated pump with an attached pressure gauge. The burst strength will vary depending on the rate of pressure increase. Similar numbers have been developed for steel. The results on steel pipe are somewhat lower than on PVC, burst strengths as measured with the above apparatus exceed 69 bar.

## **CURE**

Zip Patch sets in approximately 20 minutes at 22°C. Full cure is reached in one hour. Cure time is faster at higher temperatures and slower at lower temperatures. To speed up the cure at 10°C warm air blowers or heat lamps may be used. Zip Patch does not cure in presence of copper and its alloys.

#### SURFACE PREPARATION

Zip Patch requires minimal surface preparation. However, for maximum adhesion, the repair surface should be roughened and wiped clean with MEK, Acetone, IPA or similar. When making repairs to pipes, shut down the pressure. In tanks, pressure should be relieved by lowering the fluid level.

#### **APPLICATION**

Apply only in well-ventilated areas. The Zip Patch kit contains one adhesive-impregnated fibreglass patch, an aerosol can of activator, a plastic applicator and one pair of rubber gloves - everything required to make fast, permanent emergency repairs.

- First, carefully peel away one side of the foil pouch, completely exposing the adhesiveimpregnated fibreglass.
- Then, spray the exposed patch surface lightly but
- completely (including the corners) with the activator.
- The patch becoming darker in colour indicates proper activation.
- Apply the activated patch to the repair area and carefully peel back the remaining foil. Use the plastic applicator provided in the kit to eliminate trapped air by gently smoothing the patch from the center towards the outer edges.
- Spray the entire surface of the exposed patch lightly with the activator.

Complete instructions can be found on the product packaging.

#### **SHELF LIFE & STORAGE**

Zip Patch should be stored in a cool, dry place. A shelf life of 1 year from date of manufacture can be expected when stored at room temperature 22°C in their original containers. Shelf life may be extended by refrigeration (7°C-12°C). This product should never be frozen.

#### **PRECAUTION**

Zip Patch and the adhesive activator are flammable. Keep away from heat and flames. For complete safety and handling information please refer to the appropriate Material Safety Data Sheets prior to using this product.

#### **WARRANTY**

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

## **DISCLAIMER**

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Performance Polymers makes no representations or warranties of any kind concerning this data.

For product information visit www.devconeurope.com alternatively for technical assistance please call +353 61 771 500.

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