# GALVPATCH®

# **Data Sheet** (Feb 2013 Revision 6)

<u>Overview</u>: "Galvpatch®" is a two part solvent free organic epoxy containing 100 % solids of which >80% is micronized zinc by mass. "Galvpatch®" was developed for the approved limited repair to both hot dip galvanized and flat sheet galvanized steel in accordance with "SANS 121". When first applied "Galvpatch®" will appear to be a contrasting dull grey colour to newly hot dip galvanized components, however colour will match the dull grey appearance of weathered hot dip galvanized steel perfectly over time. "Galvpatch®" offers excellent adhesion with outstanding and lasting corrosion protection . <u>No evidence of white rust was evident after 2000 hours of controlled salt bath testing under the conditions set out in ASTM B117</u>.

#### Packaging, Surface Preparation, Mixing, Application and Cover.

**Packaging:** "Galvpatch®" is packed in boxes of 25 individually packed squish pack sachets, each squish pack is 100 Gr. The product and the activator are separated in the sachet by a thermal dividing seal. The inner sachet is placed into an outer foil liner whereby no contact is made between the components of the squish pack, thus eliminating any possibility of osmotic migration between the two products whilst packed. Pot life when mixed is 30 minutes @ 25 Deg C

**Surface Preparation:** The area to be repaired must be abraded using 200 grit wet & dry emery paper or scouring pad to roughen the damaged surface to a minimum edge distance not exceeding about 5mm from the defect site. Remove all dust and debris. Ensure that the prepared area is absolutely dry and clean before mixing and the application of "Galvpatch®"

**<u>Mixing</u>**: Hold the squish pack in one hand and force the contents of the grey paste towards the yellow liquid. Once a bulge of the grey liquid has formed at the squish pack barrier seal use your other hand to apply enough force to cause the barrier to rupture allowing the grey liquid to move through this rupture into the yellow liquid. The center seal of the squish pack must be fully ruptured by holding the opposite sides the grey pouch and by pulling apart the sides allowing the chemicals from both pouches to flow together without restriction. Hold the opposite sides of the squish pack in each hand and using a hand washing type motion, thoroughly mix the chemicals together. Mix for three minutes. (Allow 5 minutes on cold days below 18 Dec C)

Mixing of the two compartment contents will start the chemical curing action and the sachet will become noticeably warmer to the touch. <u>Failure to mix the two components</u> properly will result in product failure.

<u>Application:</u> Once "Galvpatch®" is mixed, cut off a corner of the sachet, squeeze out enough past to cover the damaged area, using the wooden spatula provided spread the "Galvpatch®" evenly to the recommended thickness of 100 µm DTM.

<u>**Cover:**</u> At 100  $\mu$ m DTM optimum thickness one sachet would give a theoretical coverage of approximately 0,25 sq/mts, however in practice a slightly smaller area could be covered due to varied substrates, inconsistent DFT's, operator skills and general wastage.

#### Warning Never use "Galvpatch®" when:

1. The pot life of 30 minutes is exceeded.

2. Substrate temperatures are not between 8 and 50 deg C

3.Ambient temperatures are below 8 Deg C.

4.Repair preparation is not done in accordance with instructions.

5. Ensure that the epoxy sachet is thoroughly mixed. That all the instructions have been carried out as printed on the outer foil guard bag and that the limitation disclaimer has been read.

<u>Health Safety & Storage</u> (Also See Summary product classification and full disclosure in MSDS)

<u>Health:</u> For skin contact wash the area with mild soap and irrigate with tepid water. For eye contact irrigate with tepid water and seek immediate medical attention. For other safety related matters refer to the 16 point European standard "Galvpatch®" MSDS

<u>Safety</u>: Always use eye protection and protective rubber gloves, use a two element respirator when working in confined spaces.

<u>Storage:</u> <u>Do Not Open</u> "Galvpatch®" sachets until required for the intended repair. Store unused "Galvpatch®" in a cool, dry and safe place, away from direct sunlight, ignition sources, children, pets and irresponsible people. (Also See Summary product classification)

Fire: Use sand or CO2 with breathing apparatus.

**Spillage & Disposal:** In accordance with local municipal by laws. (See Summary Classification)

**Transportation:** In accordance with product classification (See Summary Classification)

## Limitations of Liability by Manufacturer

<u>Without prejudice</u>. The manufacturer and it's agents obligations in lieu of warranties, expressed, implied or assumed by the vendors, shall be to replace only the quantity of "Galvpatch®" to be proven defective. The end user must satisfy himself as to the suitability of the product on the correct material before application. The user will assume all risk and liability for this product for it's intended use. The manufacturer and it's agents accept no liability for any injuries, losses or damages whatsoever resulting from the use or the inability to use this product. No part of this agreement can be altered without prior written consent.

## Product Summary:

- "Galvpatch®" Is a Registered Trade Mark.
- An approved limited repair to "Hot Dipped Galvanized Steel in accordance with SANS 121"
- Type: Organic epoxy with 100 % solids
- Zinc Content: .> 80 % by mass.
- Density: 3.375 Gr / ml
- Classification: Class 5 hazardous cargo and marine pollutant. R36/38- R43. R50/53- Very toxic to aquatic organisms. (Full classification in MSDS)
- Pot Life: 30 minutes @ 25 deg C.
- Shelf Life: 6 months (Expiry printed on sachets, foil guard bag and box).
- Max. theoretical spreading rate @ 100 micron: 0.3 sq mts.
- Packaging: 100 Gr 2 compartment thermally sealed squish pack in foil sheath. With application spatula.
- Box Contents: 25 sachets per box.
- Instructions / Warnings / Limitations: Printed on squish packs.
- Bar coding: Yes
- Surface Temp application limits: 5 to 50 deg C
- Touch Drying Times: 2 hours @ 25 deg C
- Through dry: 24 Hours.
- Chalking: None after 2000 Hrs of salt bath testing.
- Test Method: In accordance with ASTM B117.
- Full European 16 Point MSDS available: YES

Manufacturer: MAGNETRON INDUSTRIES (PTY) Ltd Supplier: