



# Metal Aid Engineers

G-2, "Jains Brindavan", 38, Brindavan Street, West Mambalam, Chennai-600033

Tel: 044-23711946, 23701225, Cell: 9444351612

Email: [metallaidengg@rediffmail.com](mailto:metallaidengg@rediffmail.com) GST: 33ADMPM1717B1Z0

## MAGIC-WRAP-PIPE & JOINT REPAIR KIT

**MAGIC-WRAP** is resin impregnated water activated fiberglass cloth tape, easy to use, quick action answer, will repair broken parts, arrest pipeline / Tank leakages etc. sets rock hard even under water.

### Where to apply?

PVC, metals, rubber, fiberglass, plastics etc. Under-water, under - ground, and in corrosion protection area.

### In Mediums

Water, acids, soda solutions, fuel oil with water, white spirit, toluene, xylene, diesel, gasoline, gas, air, steam, hydraulic fluids etc.

### TYPICAL APPLICATION: PIPE LEAK SEALING

Clean & Roughen the area to be repaired. Remove any oily or foreign particles

Soak the MAGIC-WRAP in Water for 20 seconds (Using gloves)

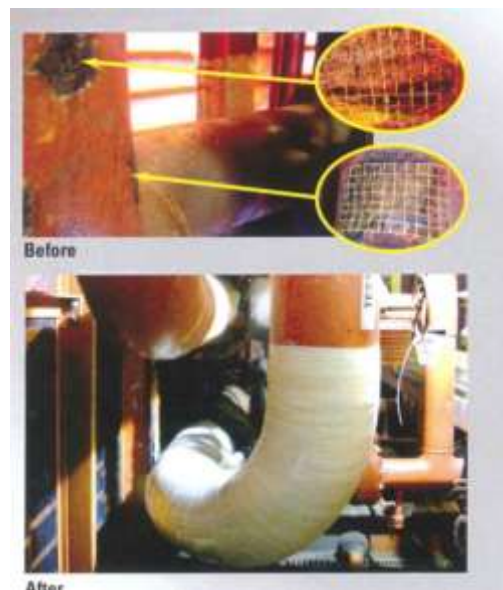
Wrap MAGIC-WRAP the entire roll, approximately 2" above and below the repair area. Wrap as tightly as possible.

Squeeze and mold MAGIC-WRAP in the direction of wrap, removing excess water and spreading resin until tacky to touch. (app.3 Mins)



A minimum of 8 layers of 'MAGIC-WRAP' is required and shall be applied from right to left or from left to right in a spirally manner around the pipe using 50% overlap. At the end of first pass, reverse the direction of the wrap and continue to apply until you have achieved specified number of layers. To achieve 8 layer application, apply 4 passes using a 50% overlap. Occasionally twisting the MAGIC-WRAP as it is applied helps it conform tightly to the pipesurfac atelbows or at odd geometries. Allow 30 minutes for complete curing.

**MULTIPLE ROLLS CAN BE USED FOR LARGER DIAMETER PIPES OR YOU CAN SPECIAL ORDER SIZES OF 4" X 20', 30', or 50'. AS A GENERAL RULE OF THUMB, USE 4-5 FT OF MAGIC-WRAP FOR EVERY INCH OF PIPE DIAMETER.**



In applications wherever wrapping is not possible, like plugging a hole, MAGIC-WRAP should be unraveled and mold into a ball and plugged into the hole and hand pressure can be given for about 5 minutes

### Product Data

#### Tensile strength Method: ASTM D3039

Hoop PSI 56,700

Axial PSI 21,600

#### Hardness Shore D

30 minutes 47

2 hours 76

24 hours 83

#### Flexural Method: ASTM D790 – 3 point flex

Strength PSI 16,100

**Shear Method: ASTM D648**

Strength PSI 7520

**Coeff Of linear exp Method: ASTM D648**

CTLE 1,06E-05

Dielectric strength 16000 volts

**TYPICAL APPLICATIONS**

impact protection

emergency repair

cracked or corroded pipes

irregular pipe fittings

force mains and gravity pipe lines

Under water repair and splash zone

Joint and tee repair

**PROPERTIES**

VOCs; None

Pressure once cured: 20.6 BARS

Working Time: 5 Mints at 24°C

Set time: 30 Minutes Approx.

**TYPICAL USAGE: INDUSTRY-WISE**

**COAL MINES:** Coal preparation wash plants: MDISC, water, steam, slurry and sludge lines etc. Emergency repairs to leaking pipes.

**GOLD MINES:** processing plant: chemical, sludge, slurry and by-product/waste pipes. Emergency repairs to chemical supply lines.

**BAUXITE MINES:** processing plant: refinery/alumina section and smelter/aluminum section. Emergency repairs to sludge & chemical lines.

**COAL, COPPER & ZINC SMELTING** Processing: blast furnaces, water, steam, sludge and slurry lines. Emergency repairs.

**STEEL SMELTER WORKS** Processing: blast furnaces, water, steam and waste product pipes. Emergency repairs until shutdown.

**STEEL SHEET & COIL MANUFACTURING** Processing: steam and water pipes. Emergency repairs to burst pipes.

**PETROLEUM** Oil, gas and water supply lines. Emergency repairs to fuel, oil and gas lines during 24 hour shift.

**SUGAR MILLS** Corrosive fluid lines, abrasive product pipes, low pressure, water and steam lines. Emergency repairs to corrosive, water, steam and abrasive lines.

**POWER STATIONS** Ash transfer systems, pulverized fuel tubes and cooling water lines. Emergency repairs to transfer systems and lines.

**MERCHANT SHIPPING** Engine room. Emergency repairs while at sea to fuel, oil, and water and waste lines. Damage control within engine room and firefighting facilities.

**Additional to leak repairs, Rapp-it can also be used as corrosion protection and noise reduction.**

**MAGIC WRAP-SELECTION AND PRICES**

Pipe Diameter	Roll size recommended	Unit
½" - 1"	50 M.M X 1500 M.M	Box= 3 Tapes
1 ¼" - 2"	75 M.M X 2700 M.M.	Box=2 Tapes
> 2"	100 M.M X 4500 M.M	Box= 1 Tape

(Tapes of higher sizes available on request)

**Chemical Resistance**

Immersion Chemical	Immersion Time	Effect	Immersion Chemical	Immersion Time	Effect
Distilled Water	60 Days	None	White Spirit	60 Days	None
Sulphuric Acid, 10%	60 Days	None	Toluene	60 Days	None
Sulphuric Acid, 50%	60 Days	None	Xylene	60 Days	None
Hydrochloric Acid, 10%	60 Days	None	Diesel Fuel	60 Days	None
Soda Solution,Saturated	60 Days	None	Gasoline	60 Days	None
Sodium Hydroxide, 20%	60 Days	None	Steam/Gas	60 Days	None
Fuel Oil + % Water	60 Days	None	Hydraulic Fluids	60 Days	None