

## TECHNICAL DATA SHEET

# SylWrap HD Heavy Duty Pipe Repair



### DESCRIPTION

Sylmasta SylWrap HD is a heavy duty, resin-impregnated fibreglass-reinforced repair tape designed for the rapid repair of cracks and leaks in pipework in high pressure (up to 30 bar) and high temperature situations (up to 250°C). It requires no mixing, it is easy to use, and repaired items can be returned to service in less than thirty minutes. It is available in 8 sizes: from 25mm x 1.8m to 300mm x 20m, enabling repairs to be carried out on pipework of all diameters. The cured material is chemically inert and is non-toxic.

### PIPE REPAIR:

**Steel Works:** Steam and water pipes, sludge and slurry lines  
**Petroleum Plants:** Repair on flammable pipe leaks without using tools - oil, gas, water supply lines  
**Power Stations:** Ash transfer systems, pulverized fuel tubes, cooling water lines.  
**Manufacturing:** Sealing of leaks in oil, water and coolant pipes.  
**Water Distribution:** Strengthen cast iron pipework, increase hoop strength  
**Pipe Porosity:** Strengthens and seals pipes with porosity due to internal corrosion.  
**Marine:** Emergency repairs in dock or whilst at sea to fuel lines, water pipes, waste pipes. Also for repairs to ship's structure.

### CORROSION & WEAR PROTECTION

**Anti-Corrosion, Pipe Protection:** Protect pipes from environmental corrosion and salt water corrosion.  
**Wear Protection:** Gravel and sand plants, quarries, sugar mills and grain hoppers and coal chutes.  
 Protects pipes and metal parts against abrasive wear.  
**Concrete and Steel Protection:** Protects concrete pillars and steel structures from salt corrosion.

### TECHNICAL DATA

**Working time:** ..... 2 - 5 minutes, dependent upon temperature of water and pipework  
**Cured material life:** ..... 10 - 20 years, dependent upon repair quality, repair thickness, condition of pipe, environmental conditions, pipe temperature etc. Consult Sylmasta for further information and design life for specific applications.  
**Initial cure time:** ..... 7-10 minutes  
**Functional cure:** ..... 30-45 minutes  
**Full cure (maximum properties)** ..... 24 hours  
**Shore D hardness:** ..... 70  
**Tensile strength** ..... 250MPa  
**Coefficient of thermal expansion:** .....  $7.1 \times 10^{-5} / ^\circ\text{C}$  (SylWrap composite wrap)  
**Service conditions:**  
**Max. service temperature:** ..... 250°C / 480°F (SylWrap has been used at 250°C with steam at 20 bar for a 2 week temporary repair and at 200°C at 20 bar for 6+ weeks) (Lab tests show thermal stability up to 300°C)  
**Pressure resistance:** ..... 30 bar (430 psi), depending on size of pipe and leak (hole requires epoxy filler first).  
**Chemical resistance:** ..... Acetone, ammonia, sulphuric acid (30%), ethyl alcohol, mineral spirits, gasoline, MEK, toluene, diesel, hydrochloric acid, Varsol, ethylene glycol, crude oil, hydraulic oil (test period of 40 days).

### STORAGE

Sylmasta SylWrap HD should be stored unopened in its original foil packaging in cool, dry conditions. Under such conditions it will have a shelf life of at least 36 months from date of manufacture.

### SIZES

Sylmasta SylWrap HD is available in the following sizes:  
 SYL106HD SylWrap, 25mm x 1.8m (for up to 15mm o.d. pipes with limited access)  
 SYL206HD SylWrap, 50mm x 1.8m (for up to 25mm o.d. pipes)  
 SYL309HD SylWrap, 75mm x 2.7m (for up to 75mm o.d. pipes)  
 SYL412HD SylWrap, 100mm x 3.6m (for up to 100mm o.d. pipes)  
 SYL616HD SylWrap, 150mm x 5.0m (for up to 150mm o.d. pipes)  
 SYL633HD SylWrap, 150mm x 10.0m (for up to 300mm o.d. pipes)  
 SYL866HD SylWrap, 200mm x 20.0m (for repairing and wrapping up to 600mm o.d. pipes, large jobs)  
 SYL1266HD SylWrap, 300mm x 20.0m (for large jobs - repairing large diameter pipes, using multiple wraps etc.)

### HEALTH & SAFETY IN USE

Sylmasta SylWrap contains a urethane pre-polymer. Plastic gloves should be worn to avoid unnecessary skin contact with the uncured material. If working on 'live' pipework take every safety precaution necessary to avoid risk of exposure to the leaking material. For further health and safety information please refer to the relevant Safety Data Sheet.  
*Sylmasta and its agents cannot assume liability or responsibility for results obtained in the use of its products by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the users responsibility to observe and adopt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.*

## SYLWRAP



**WRAS**  
WATER REGULATIONS ADVISORY SCHEME

**PIPE REPAIR**