



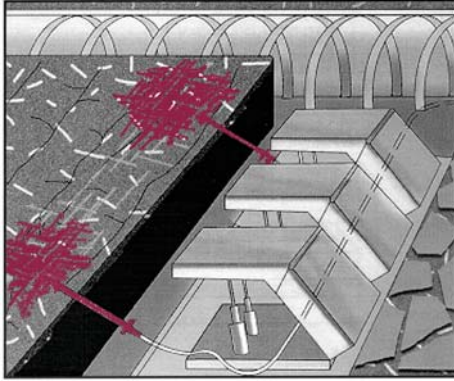
MARITHAN™

HIGH STRENGTH ROCK CONSOLIDATION

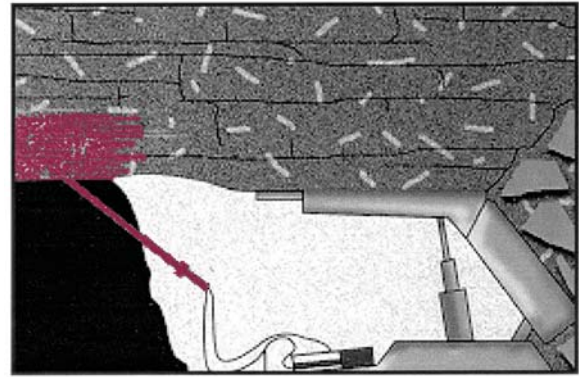
- ◆ Marithan™ is a two-component polyurethane intended primarily for strata consolidation and for sealing against water ingress
- ◆ It is applied by injection into the strata where its low viscosity gives it the ability to penetrate the smallest fissures. Thereafter it expands and sets to effectively consolidate and seal the area
- ◆ Marithan has high adhesive strength and outstanding mechanical properties which create an excellent bond with the strata
- ◆ Good flexibility allows it to accommodate rock movement
- ◆ Marithan reaches its full mechanical strength very quickly and has long term stability
- ◆ Product is effective in wet conditions
- ◆ Applications include:
 - Consolidation of highly fractured and unstable ground
 - Sealing against water ingress
 - Strata sealing
 - Injection of rock dowels
 - Sealing of rock bolts
 - Ground stabilization

MARITHAN™

HIGH STRENGTH ROCK CONSOLIDATION



Consolidation by injection



Stabilizes roof beds, side-walls and coal faces

1. BASE COMPONENTS	RESIN	CATALYST
Density at 77° F (g/cm ³)	1.03	1.23
Viscosity at 77° F (mPa.s)	150	210
Mixing Ratio (in volume)	1	1
Shelf life at 68° F (months)	6	6

2. POLYMERISED PRODUCTS - Application temperature (°F)	59°	77°
Initial viscosity (mPa.s)	370	180
Start of reaction (min)	2:50	1:20
End of foaming (min)	3:50	1:40
Expansion ratio	2	2
Compressive strength - at 10% deformation (MPa)	>10	>10
Bonding strength (MPa)	>1	>1

BENEFITS

- ◆ Low viscosity allows good penetration into small fissures
- ◆ Short reaction time - Reaches full mechanical strength rapidly
- ◆ Excellent adhesion in wet and dry conditions
- ◆ Quickly establishes good ground cohesion
- ◆ High long term stability
- ◆ High flexibility accomodates rock movement
- ◆ Swells in the presence of water

