

# HEAVY WATER

## WATER EXTENDER, COMPACTION AID AND DUST SUPPRESSANT

### USING WATER ONLY

Water used to compact construction materials, control various dust sources or simply saturate soil that will not flow and penetrate the material easily due to factors including high evaporation levels, hydrophobic material (water repelling), tightly compacted ground and steep gradients that increase runoff.

To increase water penetration and allow it to flow more freely under these circumstances water is generally flooded into the material which breaks the surface tension between the material, hence forcing the water to penetrate.

Over watering makes dust suppression less effective, increases evaporation levels, reduces compaction levels, facilitates erosion and wastes water!

### SOLUTION

HEAVY WATER combines fast acting wetting agents with polymer binders. This unique liquid acts in two ways:

#### 1. Water Penetration

HEAVY WATER breaks the surface tension between the fine materials particles and the water being applied allowing the water to penetrate deep into material rather than sitting on top or running off.

This action alone reduces water requirements by up to 50%.

#### 2. Binding

HEAVY WATER 'agglomerates' the particles together creating a bound mass which improves compaction, reduces dust, reduces erosion and minimises evaporation.

The properties of the treated water change to become a thickened solution which requires less volume to facilitate optimum results for a lesser amount of moisture being applied.

*Water now becomes much more effective.*

Water carts can travel up to 50% further, roads are compacted with less water, re-watering is required less often and soil/materials remain moist longer.

### APPLICATION

HEAVY WATER is dosed into the water cart at very low dosage rates.

1:2000 with water is required for surface treatment.

The diluted product is applied to the material being treated as if using plain water. Only *LESS* water is applied.

When blending into the material a dosage rate of 0.4 litres per m<sup>3</sup> of HEAVY WATER is added to the compaction water.

When using HEAVY WATER, application strategies and monitoring procedures will improve all watering inefficiencies.



### BENEFITS

#### Reduced Water Usage & Dust

- Approximately 50% less water required.
- Fines are bound in the road surface reducing re-watering frequency.

#### Road Condition and Maintenance

- Improved running surface resulting in reduced tyre wear and fuel usage.
- Reduced roll resistance.
- Reduced maintenance.
- Faster road recovery after rain.
- Increased pavement strength.

#### Water Cart and Grader Savings

- A decrease in operational hours.
- Equipment can be parked up or reallocated.

### DOSING

HEAVY WATER is dosed into water carts and other application equipment using standard pumping equipment.

### ENVIRONMENT

All RST products are environmentally safe and user friendly. For further detailed information on a specific product or application please contact our Head Office.