



# TECHNICAL DATA SHEET

## DURAMENT

### TECHNOLOGY DESCRIPTION: Cement Stabilization Process

Durament is a patented liquid-dispersion solution aimed to reduce resource consumption in the road building sector. Durament modifies normal, soil-stabilize and cement treated bases to perform as a concrete road base that can take a much higher load than normal pavements. Durament has proven to significantly improve the workability of the cement stabilization process in a variety of road sub-grade, pavement upgrade and rail and embankment construction projects.

### FEATURES

- High Modulus of Elasticity
- High Flexibility
- Low Water Penetration
- No “Die of Thirst” phenomenon
- Sustainable to Freeze-Thaw Impact
- Low Maintenance Cost
- More tensile w/o the decrease of compression strength
- Usage of any Soils
- Low Shrinkage or Expansion
- Anti-Cracking
- Durable Road Base
- Can use Salt Water

### USES

Pavement and Heavy Load-Bearing Areas: Durament can be used when mixed thoroughly with cement and any pavement material required providing compacted strengths of up to 20MPa. The chemical polymer development process between Durament, water, cement and the moisture content of the pavement material binds the mix, providing a relatively flexible pavement with compaction densities of up to 105% (Modified) AASHO with 3 to 4 passes of the appropriate type of roller in a very quick time after application.

Retaining Walls/Dams/Trenches: With its greater flexibility and waterproof characteristics, Durament, when mixed with cement, is a suitable stabilizer to use in the construction of tailing dams, water-retention dams, canals and levee banks and airstrips. Even salt water can be used as the water mix, with the only down-side being a longer curing time required.

Can also be used for;

- Mining Haul Roads and Heavy-Duty Site Access Roads
- Local Light Traffic Roads and Footpath Construction
- Railway Embankment Capping Layer

## BENEFITS

- **Unique Ability** to be used with the in-situ soil material – sand, coral, loam, clay (including high plasticity clays). Can be mixed with fresh, brackish or salt water.
- **Extends road building season – Emergency winter patch work** – can be installed in sub-freezing temperatures due to heat-creating exothermic reaction.
- **Inert** – Durament roads are inert, having no adverse effect to the environment and capable of withstanding temperatures from -60 to +60C.
- **Increased road life** – 10 to 20 years on average with low maintenance. New road construction or to renovate old roads, including recycling damaged asphalt roads.
- **Less Expensive** road construction costs.
- **Creates a greater tensile strength** than reinforced concrete – eliminates cracking and pot-holing in most conditions.
- **Faster road construction** – up to 8000 m<sup>2</sup> per 8 hours, depending on conditions. Allows use by traffic within 2 hours of final grading and rolling. Simplifies road design and specifications. **Enables continuous 24/7** road construction.
- **Reduces dust** in dry conditions – saves in dust control spraying.
- **Reduces maintenance** by 70% to 85%.
- **Can be topped with asphalt**, cold mix tar and chip, fine gravel rolled in to provide a wearing surface – or left unsurfaced for small or low traffic roads.

## PRODUCTS

Durament: The patented base product which significantly improves the workability of the cement stabilization process in a variety of construction projects.

Durament WP: A derivative of the patented product, Durament, but with added solids which provides a higher waterproofing ability and gives slightly more flexibility. It is the preferred product in areas where there exists a high probability of water/flooding, usually on a periodic basis as a result of climate and seasonal factors.

Durament WS: A direct version of Durament, but manufactured in a controlled, concentrated form. It has been developed to assist customers with volume handling and freight issues. It is ideal for pavements.

## ADDITIONAL INFORMATION

If you need additional information, please contact our offices.