Chembase Treatment System (CTS)

Application and treatment of plantation road sub-base layers

Product: Chembase® C-SSSB1 | Research and development

“It costs you nothing to find out how much you can save.”

Why roadside trees matter

Clean air

Trees absorb carbon dioxide, give off oxygen and store carbon.

Clean soil and water

They clean the soil and keep water pollution in check.

Less noise

Trees absorb sound vibrations from many sources.

Slower stormwater

Run-off slows after rain.

Shade and cooling

Lower temperatures and more pleasant roads.

Windbreaks

Shelter from strong winds.

Less soil erosion

Roots hold the ground together.

Higher property value

Planted roads add value to the land.

Wildlife shelter

Habitat for birds and animals.

Plantation cropping systems

Monoculture

Mono-cropping: a single crop grown on the land.

Intercropping

Two or more crops grown simultaneously on the same field.

Crop rotation

Different crops grown in sequence on the same land.

One product, supplied in two parts

PART A

Polymer-Stabiliser

+

PART B

Activator

Chembase®
C-SSSB1

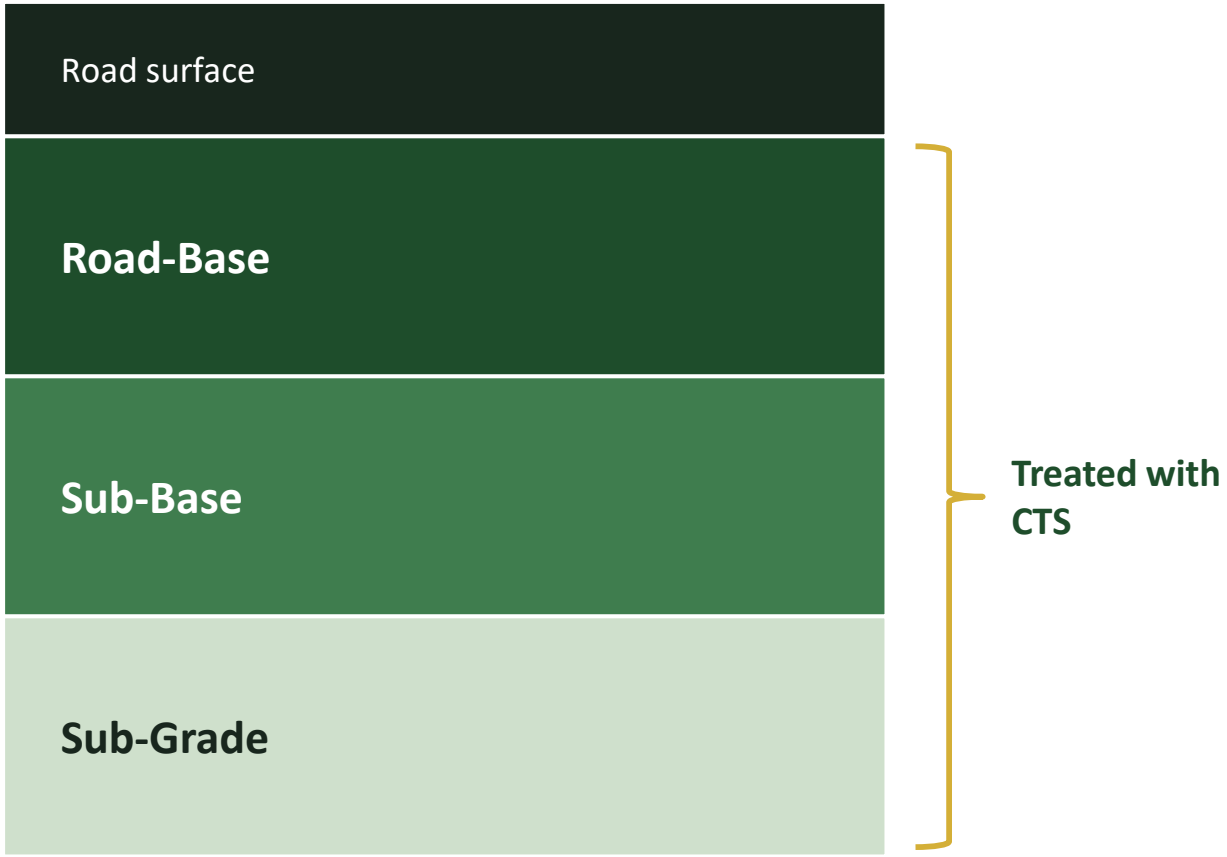
Five characteristics
combined in one product

A simplified range

- Five different chemistry characteristics are now combined into a single Chembase product.
- The application and treatment methods stay the same.
- The same characteristics, benefits and advantages are retained.

Naming: CTS stands for Chembase Treatment System. Chembase is also known as Chembase International and Chembase International Group.

Where CTS works: beneath the road surface



Indicative cross-section

CTS modifies the properties of the existing soil to improve performance and durability.

- **Greater strength**
- **Higher load-bearing capacity**
- **Resistance to moisture-related issues**

Chembase and conventional road construction work together.

From stabilised layers to lower costs

1. **Stabilised base layers**
   CTS stabilises the road-base, sub-base and sub-grade.

2. **Less water, fewer potholes**
   Water leakage and potholes are reduced in the treated area.

3. **Less maintenance**
   The treated area needs less ongoing repair.

4. **Lower cost, longer life**
   Reduced costs and greater longevity for the treated area.

Performance benefits of treated layers

CBR increase

Raises the California Bearing Ratio (CBR), a standard measure of soil strength.

Water resistance

Treated layers resist water, limiting moisture-related damage.

Liquefaction resistant

Treated soil resists liquefaction, the loss of strength in saturated ground.

Freezing-condition tolerance

Tolerates freezing conditions.

Oil and petroleum barrier

Prevents oil and petroleum penetrating the treated soil.

Longevity

A long service life for the treated area.

Practical and environmental benefits

On site

Workable in any weather
Application is not held up by conditions.

Stable once diluted
The diluted product will not oxidise.

Re-compactable
Treated soil can be re-compacted (20 years).

Savings
Less maintenance and reduced costs.

Safety and sustainability

Safe to use
Product-safe and environmentally safe.

Waste plastic and glass
Shredded plastic or stained glass added to treated soil increases CBR.

Ash waste
Ash added to treated soil increases CBR.

Saltwater
Saltwater can replace fresh water, and increases CBR.

Brick pavements
Can be used in brick pavement manufacturing.

What CTS does for plantation roads

Built for plantation roads

The Chembase team developed CTS to work with standard plantation road construction.

Less maintenance

Fewer potholes and less ongoing repair on treated roads.

Water resistance and longevity

Water resistance gives the plantation road base a longer life.

WITH THE RIGHT ROADSIDE PLANTING

- **Lower maintenance cost**
- **Safer for vehicles**
- **A better drive**
- **Less soil erosion**

It costs you nothing to find out how much you can save

Talk to Chembase about treating your road-base, sub-base and sub-grade layers.

INDEPENDENT UNIVERSITY REPORTS

Reports from The University of Sydney and UNSW (University of New South Wales) are available at www.chembase.com.au

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