



## ***HYGT CCT-0815***

### ***SOIL STABILIZATION***

#### ***PRODUCT DESCRIPTION***

**HYGT CCT-0815** is a biodegradable chemical product consisting primarily of polysiloxane, a natural surfactant comprised of synthetic and mineral salts which have been modified to act as mechanical, physical, and chemical enhancers. HYGT CCT 0815 is ideal for unpaved roads, acting as a strong stabilizer that modifies the water absorption properties of materials, transforming hydrophilic materials to hydrophobic materials, ultimately ensuring long-term performance and durability. The product is both non-contaminating and extremely time-efficient, which ultimately results in significant reduction of cost. The reaction mechanism of HYGT CCT 0815 is strongly effective over clay and/or unsuitable soils. HYGT CCT 0815 reduces the plasticity of the subgrade soils, often the biggest issue when building roads.

#### ***Characteristics and Application***

After applying HYGT CCT 0815, soil compaction can be achieved with minimal mechanical effort as the product binds clay particles together in such a closed molecular structure that it optimizes the orientation of the particles. The treated soils then achieve a higher unit weight, which further increases the effect of several key soil parameters such as bearing capacity & bearing ratio, resulting in stronger bearing materials. At the same time, the product prevents water from entering soil layers within the pavement system, maintaining a balanced moisture content and ensuring a stable system.

HYGT CCT 0815 has a significant effect on the stabilization of a wide range of materials with variable clay content that would make them unsuitable for road applications.

The product is water-soluble and biodegradable, as it presents no signs of toxicity or contamination. Furthermore, it is manufactured on domestic land in Mexico by HYGT Chemical of Mexico, under strict quality control measures and following international standards.



Road treatment evaluation is determined by sustainability indexes that are affected by climate, use, frequency, erosion, cracking, cupping, and other variables.

## *Physical and Chemical Properties*

<b>CHEMICAL COMPOSITION</b>	Polysiloxane a natural surfactant, both synthetic and mineral salts modified
<b>APPEARANCE</b>	Thick Liquid, Dark Brown to black
<b>SOLUBILITY</b>	Complete in wáter
<b>PH</b>	In Solution to 10% pH 5,5 - 7,5
<b>ODOR</b>	Characteristic alkaline mild
<b>INFLAMMABILITY</b>	NOT Flammable
<b>VOLATILITY</b>	NOT VOLATILE
<b>BIODEGRADABILITY</b>	Biodegradability 100 %
<b>CORROSIVITY</b>	NOT Corrosive
<b>CONTAMINANTS</b>	NOT CONTAMINATE ( <b>Biodegradability</b> )

## *ADVANTAGES AND BENEFITS OF THE PRODUCT HYGTT CCT-0815*

### **Advantages and Benefits Technical**

- Increase in road-weight tolerance
- Safer surface for use during rain
- Permanent alternative
- Low-Maintenance
- Increased CBR index
- Lessened wáter/humidity re-absorption
- Product is finalized independent of any additives
- Highly wear resistant

### **Operational Benefits**

- ❖ Easy to use
- ❖ Time efficient-less operative work hours as the time it take to build a road with our product is significantly reduced.
- ❖ Not harmful for personnel
- ❖ Floor usage IN SITU
- ❖ CCT-0815 treated in-situ roads require only a stabilizer, water truck and roller.

### **Economical Benefits**

- Technological advantage reduces construction cost.
- Less maintenance-less repair and irrigation needs.
- Less material transportation costs.
- Less traditional thickening agents.
- Fast process that lessens need for machinery.

### **Ecological Benefits**

- Biodegradable
- Less granulated material lost
- Control of dirt release translating into less impact on agriculture
- Non-toxic, non-corrosive, non-explosive, non-contaminate
- Better overall quality of life for population and farms.
- Dust suppression
- Protect workers and members of local communitis from respiratory health concerns associated with fugitive, airborne dust