

## ISONEM SS SOIL HARDENER TECHNICAL DATA SHEET

<b>Product Name</b>	: ISONEM SS Soil Hardener
<b>Type</b>	: An ecologic agent used to stabilize and solidify any soil or aggregate as well as dust suppression.
<b>Density (25°C, g/mL)</b>	: 1.00 ± 0.10
<b>pH (25°C)</b>	: 7.0 – 10.0
<b>Viscosity (25°C, mPa.s)</b>	: 4000 - 9000
<b>Solid Content (% Weight)</b>	: 50 ± 2
<b>Solvent</b>	: Water
<b>Flash Point (°C)</b>	: N/A (not applicable)
<b>Color</b>	: Milky White (transparent once cured), it can be colored if required.
<b>Packaging</b>	: 5, 10, 20 kg PE Barrel
<b>Application Temperature (°C)</b>	: 5 – 35
<b>Storage Temperature (°C)</b>	: 5 – 35
<b>Storage Condition/Shelf life</b>	: 24 months from production date, if stored dry condition

### USAGE AREA

- Unpaved dirt roads.
- Construction sites and roads.
- Heavy haul roads.
- Road base and sub-base.
- Storage and stock piles.
- Power plants.
- Helipads.
- Airport infields.
- Mine tailings and areas.
- Land development.
- Construction parking areas.
- Event parking lots.
- Road shoulders.
- Slopes and berms.
- Forestry roads.
- Agricultural roads.
- Border patrol roads.
- Golf courts and trails.
- Parks and recreations.
- Storage lots and ponds.

## APPLICATION METHOD

ISONEM SS is a concentrated ready to use solution. Application area should be completely dry and free from water. The area must be free from rain for a minimum of 72 hours after the application. Temperature must be at least 4°C. Compact the application area to a minimum of 95%. pre-wet the test plot with water (only) at a rate of 2,5 L/m<sup>2</sup> to break the surface tension and increase penetration depth. Solution should be sprayed to surface slowly and uniformly.

NOTE: During and after the application surfaces should be protected from rain, water, mechanical loads and impacts for 24 hours.

## APPLICATION COVERAGE RATES

- Unpaved dirt roads with high traffic: 1 lt ISONEM SS + 6 liters water
- Dust control: 1 lt ISONEM SS + 10 liters water
- Aircraft runways (heavy traffic) and construction areas: 1 lt ISONEM SS + 4 liters water.

These rates depends on the type of the application surface, soil, sand... In order to obtain the most suitable dilution rate and consumption rate, trial applications should be done.

## PREPARATION OF ISONEM SS DILUTION

Fill the application equipment with the recommended volume of water and then fill the application equipment with the recommended volume of ISONEM SS concentrate and mix. ISONEM SS Dilution should be applied by uniform layers and should be compacted. Each successive coat of ISONEM SS dilution should be applied in a timely manner to ensure that the surface always stays wet with the ISONEM SS dilution. DO NOT allow the ISONEM SS dilution to dry between the application coats. Apply the dilution in minimum 4 coats. Allow the area to dry and cure for a minimum of 24 hours, prevent any human activity over the area until it has completely cured.

**Normal Life Span:** Topically, 12-24 months prior to first maintenance coat. Approximately 30% the original volume used after the first 24 months. Once cured, ISONEM SS is no longer water soluble and will not dissipate or wash away. ISONEM SS can be diluted with sea salt water in mandatory cases. Do not store sea salt water dilution over 8hrs.

**Performance Factors:** Application rate, soil type, dilution, compaction, traffic, penetration, climate & others.

## FEATURES AND BENEFITS

Once applied to the soil or aggregate, the copolymer molecules coalesce forming bonds between the soil or aggregate particles, originates with its long, nanoparticle molecular structure that link and cross-link together. As the water dissipates from the soil or aggregate, a durable and water resistant matrix of flexible solid-mass is created. Once cured, it becomes completely transparent, leaving the natural landscape to appear untouched.