

## Product Specifications

# EcoGEM®+90

Calcium Sulfate Dihydrate

## Product Benefits

All of the EcoGEM®+ products are high-quality, mined calcium sulfate, suitable for use in agriculture. Also available are products listed for use in organic agriculture by the Organic Materials Research Institute. EcoGEM products deliver the following benefits:

**Soil Health.** Calcium sulfate is a vital part of a proper nutrient plan, along with other soil health management practices, such as crop rotation, cover crops, mulching, no till, and pest management. For overall soil health management, calcium sulfate has many properties that ultimately help soil to be more efficient and more productive.

**Conserves Irrigation Water.** With enhanced water infiltration and soil health, roots grow deeper. Our research has shown that plants may require up to 30% less irrigation water while maintaining or improving yields. Less water equals less expense and a reduction in overall pressure on water supplies.

**Improves Soil Structure.** EcoGEM calcium sulfate can improve soil health by helping aggregate soil particles into peds or small clumps. These peds loosely aggregate together creating pore spaces that allow water to infiltrate. After treatment with EcoGEM products, your soil will hold more water.

**Remediates Sodic (Salty) Soil.** Sodic (salty) soils are characterized by poor drainage, poor structure and crusting due to a high level of sodium ions on clay particles that cause the soil particles to disperse. EcoGEM® calcium sulfate can be used as an amendment to improve soil health by replacing the sodium with calcium. The calcium allows the soil to be leachable which improves the soil and promotes better crop growth.

**Reduces Cracking.** Cracking of soil is common with the swelling and shrinking associated with high levels of exchangeable sodium on montmorillonite-type clay particles. When EcoGEM® products are applied

to soil, sodium is replaced by calcium on these clays. The clay particles swell less and do not easily clog the pore spaces. Less swelling allows roots, air, and water to move easily through the soil.

**Reverses Compaction.** Soil compaction can be a major problem that hampers soil health. Natural surface compaction in many soils can be alleviated with EcoGEM products. In areas with high levels of compaction, a combination of EcoGEM calcium sulfate with deep tillage can be a highly effective way to break up compaction. Soils that have been treated with EcoGEM calcium sulfate have wider range of soil moisture levels where it is safe to till or traffic without risk of compaction.

**Improves Water Infiltration.** EcoGEM calcium sulfate, when applied directly to the soil or added to irrigation water, improves infiltration (how much water penetrates and how deep) rates and hydraulic conductivity of the soil. Because the soil is better able to drain, it is less likely to become water logged due to clay swelling, excess water or high sodium levels.

**Reduces Crusting.** Soil crusting hampers seed emergence. Crusting gives soil an impenetrable surface. This happens when unaggregated clay particles settle and seal the surface and dry into a cement-like crust. With EcoGEM calcium sulfate products, soils aggregate better, crusting is reduced, and overall soil health improves.

**Provides Calcium and Sulfur.** EcoGEM calcium sulfate products are in the form of calcium sulfate dihydrate. They are soluble and thus available to the plant, providing the essential macronutrients calcium and sulfur.

**Improves Crop Yield.** With all of the benefits that EcoGEM calcium sulfate products have for soil health, the end result is your soil is able to produce healthier crops and better yields.

<b>EcoGEM Gypsum Spec Sheet</b>	
<b>90%+ Percent Gypsum</b>	
<b><i>Chemical Analysis</i></b>	
Calcium	22.4%
Sulfur	17.8%
Calcium Sulfate Dihydrate (purity)	90%+
Moisture	1.80%
<b><i>Sieve Analysis</i></b>	
Passing through 4 mesh	100%
Passing through 100 mesh	34.0%
Passing through 200 mesh	22.1%
*Passing through 1/8 inch (-)	100%
*The lowest vibratory screen is #8 mesh. Everything passing thru is no larger than 1/8 inch minus material.	