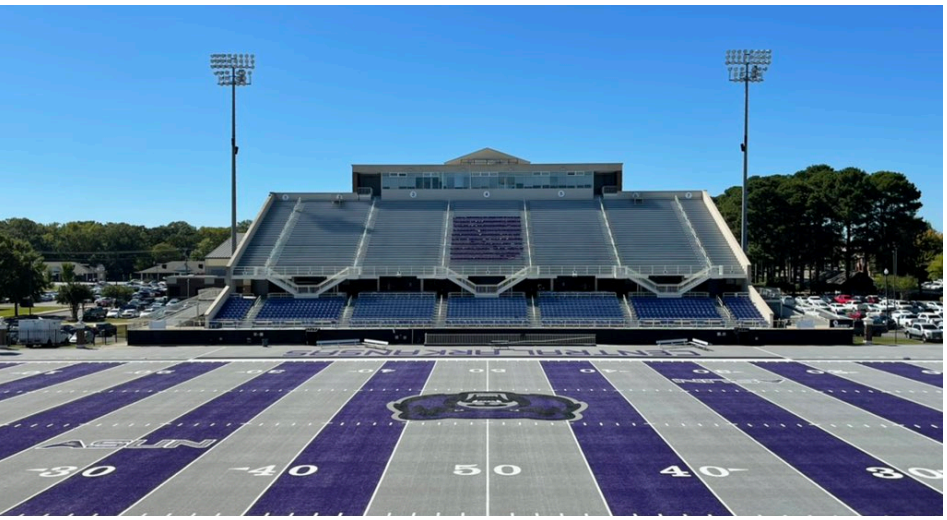
GeoCool™ Cooling Agent



HIGH-PERFORMANCE COOLING AGENT WITH ULTIMATE TEMPERATURE REDUCTION

GeoCool is ***NOT*** a performance infill. Instead, GeoCool is an innovative cooling agent that provides heat absorbtion and disbursment for reduction in surface temperatures.

Infills are typically defined as materials that are added to a turf system that impact ball play, ball action, foot feel and foot action. As something that is designed to pull heat away from the playing surface and is a maintenance free additive, GeoCool is never visible and serves as a light coating on the primary backing.

GeoCool is an inorganic oolitic 'egg shaped' calcium carbonate mineral 'argonite' created - and constantly renewed - in shallow sea beds. It is 100% recyclable, neutralizes some odors, and is virtually dust-free. It is non-toxic - in fact, calcium caronite has been ingested by humans for eons.

GeoCool has a specific gravity similar to sports field sand which means it will not float in heavy rain events and will not blow away in dry, windy environments.

KEY ATTRIBUTES OF GEOCOOL:

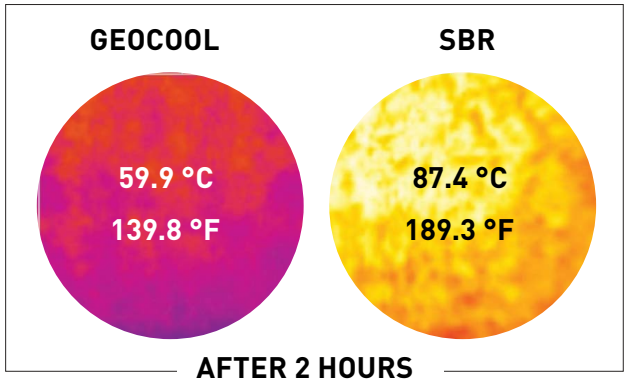
- Surface temperature reduction through dispersion of heat and slow water evaporation
- Resistant to decay, rot and mildew
- PVC and vinyl free
- Contains no silica
- Lead content: <0.25ppm
- Permeability: 220+ in/hour
- Low dust emission: 114 micrograms/meter3
- Prop 65 compliant

GeoCool™ Cooling Agent

SUPERIOR TEMPERATURE REDUCTION

After two hours of exposure to a heat source, turf with GeoCool was measured to be 50°F COOLER than turf with SBR granules.

GeoCool has a unique crystalline structure that aids in natural heat reduction: It is a mineral with a high surface area and thus high micro-porosity. As a consequence, GeoCool is very hydrophilic (it loves water)—it absorbs and captures a high amount of moisture from the atmosphere or when watered. And as the moisture in GeoCool granules evaporates, the playing surface and athletes on it cool significantly.



HIGH-PERFORMANCE COOLING AGENT

GeoCool is a high-performance cooling solution that tests well against FIFA standards.

- FIFA Quality Pro range
- Ball Rebound
- Shock Absorption
- Deformation

GeoCool has very similar energy restitution to natural grass, which results in better ball handling and behavior for players.

SUSTAINABLE SOLUTION

GeoCool is THE environmentally responsible additive.

GeoCool is biogenic (produced by living organisms) and as it is generated, carbon dioxide in the atmosphere is reduced. GeoCool is truly sustainable as the material is constantly being replenished.

GeoCool is dredged, not mined – unlike other additives like silica and zeolite. This means a reduced carbon footprint as dredging uses less fuel-intensive methods.

GeoCool does not contribute to the microplastic issue affecting our oceans. It is not synthetic and can be fully recycled or repurposed.

CHEMICAL ANALYSIS

XRF Analysis & XRD Analysis
Natural Potassium-Sodium AluminoSilicate
GeoCool by Tencate

XRF Chemistry Analysis GeoCool by Tencate		
Element	**Formula**	**Percentage**
Silicon Dioxide	SiO_2	71.5
Aluminum Oxide	AL_2O_3	11.3
Potassium Oxide	K_2O	4.55
Ferric Oxide	Fe_2O_3	2.05
Sodium Oxide	Na_20	1.24
Calcium Oxide	CaO	1.22
Titanium Oxide	TiO_2	0.27
Magnesium Oxide	Mg0	0.17
Barium Oxide	BaO	0.15

XRD Chemistry Analysis GeoCool by Tencate	
Phase ID	**Weight %**
Clinoptilolite	88.3
Tridymite	7.2
Cristobalite	4.5
K-Feldspar	Nd

Trace Elements GeoCool by Tencate	
Lead	3.2 - 55 ppm
Arsenic	0.28 - 2.68 ppm
Cadmium	6 ppm
Barium	30 ug/L
Chromium	< .001%
Lead	.001%
Selenium	< .05 ppm
Silver	< 2 ppm
Iron	.18 mg/L
Aluminum	680 ug/L
Mercury	< 0.12 ppm
Antimony	< 1.0 ug/L
Beryllium	0.4 ug/L
Chromium	0.9 ug/L
Cobalt	< 2.0 ug/L
Copper	< 2.0 ug/L
Nickel	< 2.0 ug/L
Strontium	< 2.0 ug/L
Thallium	< 2.0 ug/L

Microbial Analysis GeoCool by Tencate	
Total Aerobic	510 CFU/g
Aspergillus flavus	NR
Aspergillus fumigatus	NR
Aspergillus niger	NR
Aspergillus terreus	NR
Total Enterobacteriaceae	ND
Total Coliforms	10 CFU/g
Pathogenic E. Coli	ND
Salmonella	ND
Total Yeast & Mold	410 CFU/g