

**Eco-friendly Water Saving
in Modern, Sustainable Landscaping**



Technical Information



**Natural Water Conservation
For Our Future Generations**



What is Zeoplant?

Zeoplant is a very effective water retaining soil additive, consisting of fully natural mineral materials.

It **saves operation and maintenance cost** for Landscaping, Sports Turf etc. substantially because:

Zeoplant reduces the necessary irrigation water consumption by 50% creating the most sustainable landscaping & forestation projects

Zeoplant's additional benefits are:

- **Savings of 50% electricity** for pumping of irrigation water
- **Direct wear & tear savings** on maintenance for pumping units & irrigation equipment
- **Run-time reduction** of the irrigation system which reduces man hours at operation
- **Reduction of storage cost** for irrigation water (minimize/ eliminate tanks)
- **Reduction of chemical fertilizers** during maintenance and operation through prevention of leaching. Therefore, monetary savings in time, logistics, labour, spreading
- **Healthier and faster growth** of plants and crops which can be substantially proven (temperature controlled areas, i.e. Green houses and open areas)
pH is reduced and **EC increased** which effects growth rate by providing the plants more nutrients
Zeoplant has a **high CEC** and contains lots of nutrients
- **Replaces the usage of peat moss** completely
- **Reduces carbon footprint**
- **Reduces plant mortality**

Due to its mineral origin, Zeoplant does not need any re-application and stays active in the soil for many years.



Zeoplant mine and factory in Hungary

Approved by Government Authorities and all international Consultants !



In an era where environmental consciousness is paramount, companies worldwide are seeking innovative solutions that balance economic growth with ecological responsibility.

Zeoplant, a ground-breaking soil additive that ensures water conservation, emerges as the ideal choice for sustainability-focused clients. Let's delve into why Zeoplant stands out as the pinnacle of water reduction landscaping.

1. 100% Natural Composition

Zeoplant is a harmonious blend of mineral components, some of which are exclusive to the producer's mines.

2. High Water Holding Capacity (WHC)

Zeoplant's remarkable WHC allows it to act as a moisture reservoir. Even in the harshest climates—sand, scorching temperatures, direct sunlight, and saline ground - Zeoplant thrives. It retains water efficiently, reducing irrigation needs significantly. For sustainability-focused companies, this translates to water and resource conservation as well as cost savings.

3. Proven Performance in Challenging Environments

Zeoplant's efficiency and achievements in critical soils remain unmatched. Numerous official clients, government departments, and major developers in the United Arab Emirates, Saudi Arabia, Oman, Bahrain and Qatar have witnessed Zeoplant's transformative impact. From lush gardens to water-saving landscapes, Zeoplant consistently delivers.

4. Environmental Stewardship

As water scarcity intensifies globally, responsible water usage becomes paramount. Zeoplant aligns economic interests with ecological imperatives. By reducing water consumption, it contributes to a sustainable future. Whether it's treated, desalinated, or natural water, Zeoplant ensures efficient utilization in landscaping projects.

5. Rapid Return on Investment (ROI)

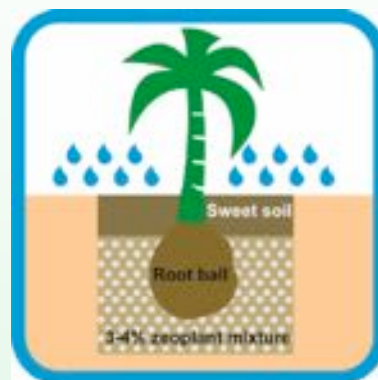
Investing in Zeoplant pays off swiftly. By drastically decreasing operational expenditure, clients recover their capital outlay promptly. Zeoplant's water-saving capabilities directly impact the bottom line, making it a smart financial choice for conservation-driven enterprises.



Installation of Zeoplant for New Plantations

Palm Trees & Trees

Mix Zeoplant with sweet soil taken out of the tree pit at ratio 3-4% by volume. Fill the mix back to the pit at 15 – 30 cm layer; then place the root-ball on this layer and fill the rest of the Zeoplant-sweet soil mix around the root-ball until root-ball is fully covered. Fill the upper pit with normal sweet soil.

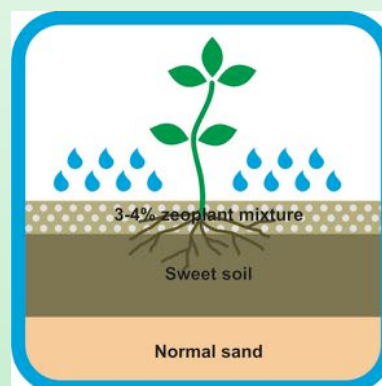


Shrubs & Ground cover

Mix Zeoplant with sweet soil and fill around the roots of the plants similarly to the application for trees. For planting beds just mix Zeoplant at 3 – 4 kg/m² in the sweet soil at a depth of 15 – 30 cm

Lawns

Apply 3 kg/m² on the sweet soil and rake in or mix in by rotavator at a depth of 8–10 cm. After levelling of the Zeoplant-sweet soil mix, grass can be planted by stolons or turf.



Physical & chemical characteristics of Zeoplant

pH	:	6.7 – 7.1
Content of potassium	:	3 %
Soluble potassium content	:	0.7 %
Content of nitrogen	:	800 mg/kg
Content of phosphorous	:	400 mg/kg
Ca & Mg	:	160 meq/kg

Guaranteed savings by using Zeoplant:

- Minimum 50% irrigation water
- Minimum 50% on NPK fertilizers
- Pumping, storage, electricity & maintenance cost for irrigation



Application Rates Zeoplant

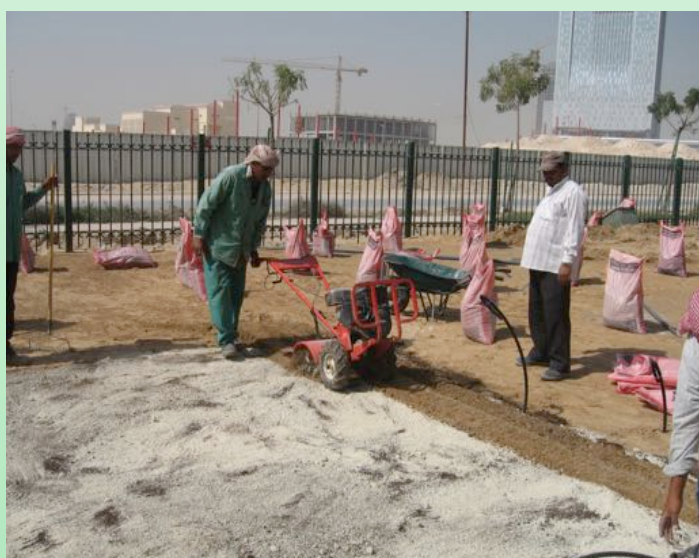
Please find our application rates for Zeoplant (new plantations) as follows:

Plant	Unit	Dosage Kg/unit	Mixing methodology
Palms	piece	30-150	Depending on root depth & pit size to achieve 3% ratio by volume
Trees	piece	20-120	Depending on root depth & pit size to achieve 3% ratio by volume
Shrubs	piece	1-2	Depending on root depth/volume
Shrubs	m ² bed	5	Mixed in the upper 20 cm of the topsoil
Grass	m ²	3	Mixed in the upper 8-10cm of th topsoil
Ground cover	m ²	3-4	Mixed in the upper 10-15cm of the topsoil
Ornamental grass	piece	1	Mixed in the grass pit
Flower bed	m ²	3	Mixed in the upper 8-10cm of the topsoil

The ideal ratio of Zeoplant should be at 3-4% mixture to the sweet soil at the roots level.

How to apply Zeoplant

on-site application at 3 kg/m² by rotavator



pre-mix application at 3-4% by volume

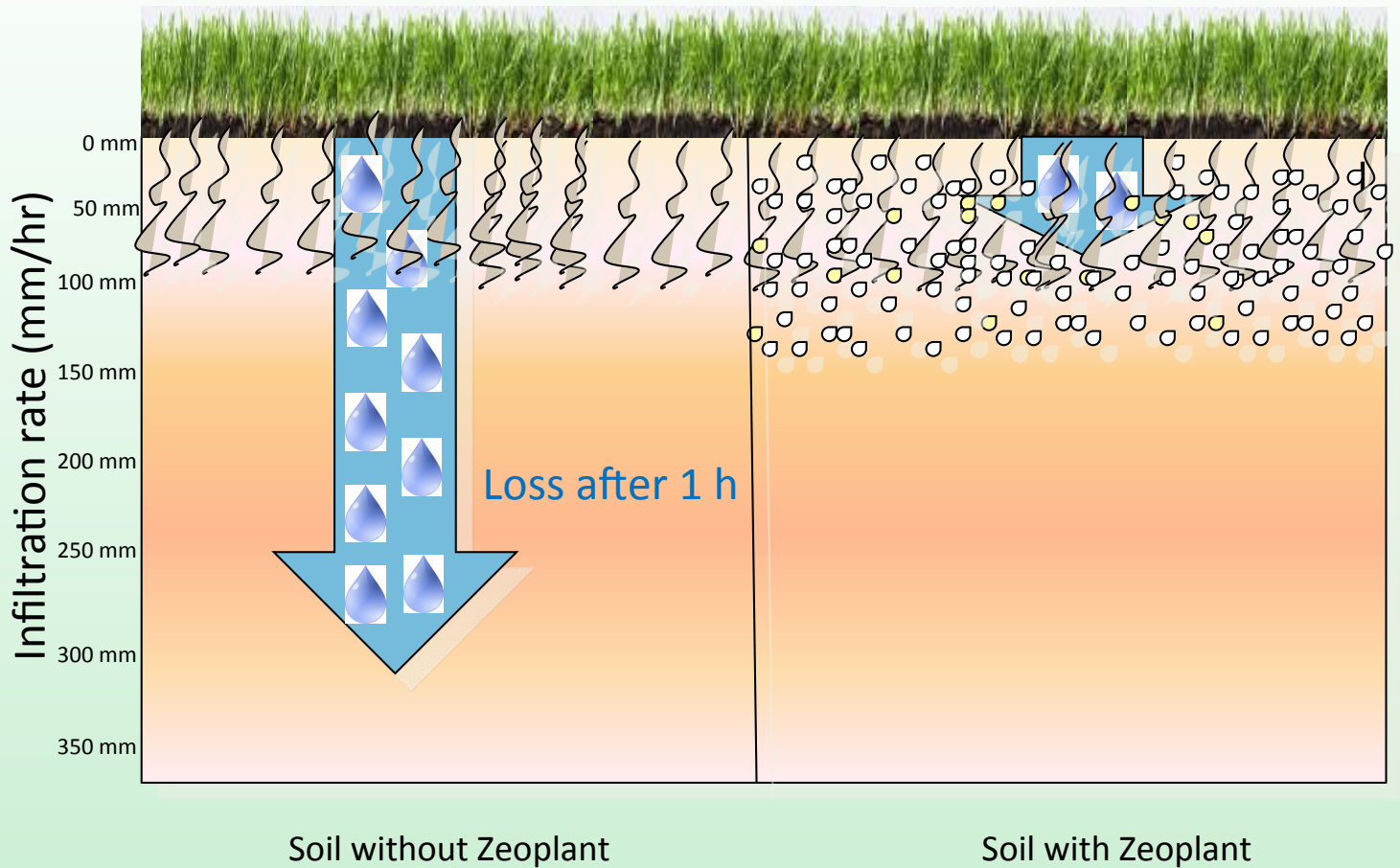


Zeoplant is just applied once and does not need any reapplication later on !

Zeoplant Reduces The Infiltration Rate



The chart shows how deep the irrigation water flows down the soil within 1 hour



PHYSICAL PROPERTIES (ASTM F-1815-97 with water release, Modified¹)



Lab ID No.	Sample	Bulk Density (g/cc)	Particle Density (g/cc)	Ksat Infiltration (mm/hr)	Total Porosity %	Aeration Porosity ¹ %	Capillary Porosity ² %
19670-1	Sweet Soil	1.59	2.68	319	40.6	19.4	21.2
19670-1a	95-5 Sweet Soil - Zeoplant	1.64	2.68	45	38.7	8.6	30.1
19670-2	Red Soil	1.59	2.68	328	40.6	21.3	19.3
19670-2a	95-5 Red Soil - Zeoplant	1.60	2.66	75	39.7	15.4	24.3

¹ Compaction energy modified to 1.2 J/cm²

² Determined 0.06 bar

This laboratory results had been measured by Hummel & Co., accredited USGA Lab from USA.

Zeoplant – Retro-fitting Application into Existing Lawn/Turf by Aerification

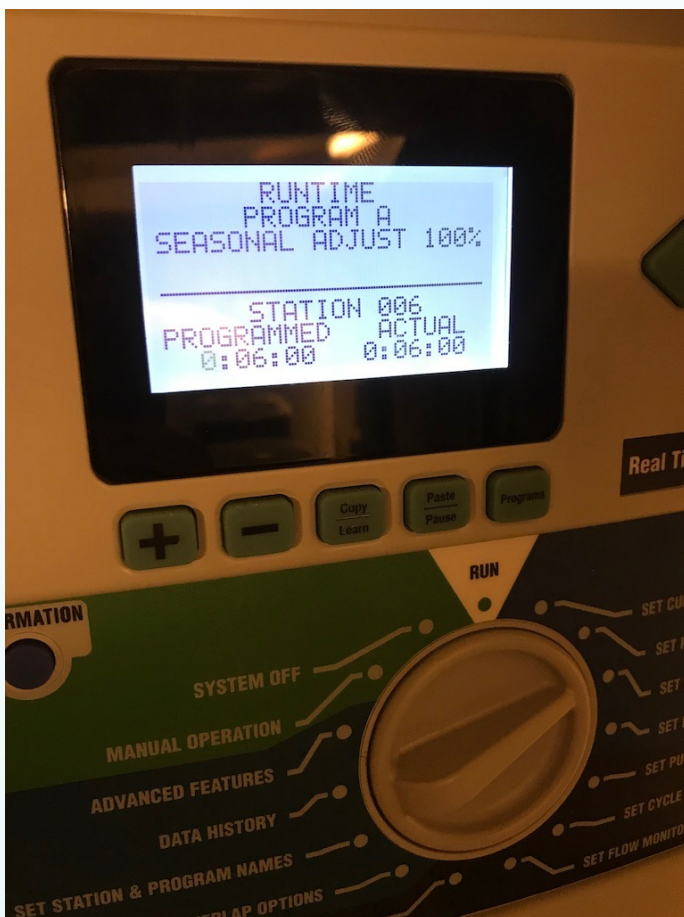
Numerous high profile projects carried out to VIP Clients and Golf Courses with minimum 50% water savings!



Clients' Testimonials available on request.

Additional Complementary Services

- On-site Assistance for Project Management & Client
- Irrigation Recommendations during O&M
- Regular Moisture Control
- Documentation & Reporting to Client



Selected recent Projects

Project	Location	Client	Year
33 Community Parks in Mohamed Bin Zayed City	Abu Dhabi	Dept.of Municipalities & Transport	2024
Jebel Ali Golf Course - Retrofitting into existing Turf	Dubai	JA The Resort	2023
Mina Tunnel Project	Abu Dhabi	Musanadah	2023
28Community Parks in Khalifa City	Abu Dhabi	Dept.of Municipalities & Transport	2023
Exisiting Turf Treatment	Abu Dhabi	Presidential Court	2022
RSG Nursery	Saudi Arabia	The Red Sea Development	2022
Application of Zeoplant into 2.5 Mio m2 of existing turf grass into VIP Palaces	Abu Dhabi	ADDC - Abu Dhabi Distribution Company	2022 - 2023
Umm Ghafa Park	Al Ain	Dept.of Municipalities & Transport	2022
Celebration Plaza Al Shamka	Abu Dhabi	Dept.of Municipalities & Transport	2022
Khalifa City StreetScape & 6 Parks	Abu Dhabi	Dept.of Municipalities & Transport	2021 - 2022
Midfield Terminal	Abu Dhabi	Abu Dhabi Airport	2021
Port de la Mer	Dubai	Dubai Properties	2021
Reem Forest Ghadan 21	Abu Dhabi	Government of Abu Dhabi	2020
EXPO 2020	Dubai	Government of Dubai	2020
Villanova Develpoment	Dubai	Dubai Properties	2020
Serena Develpoment	Dubai	Dubai Properties	2019
Arabella Develpoment	Dubai	Dubai Properties	2018 - 2019



Company Profile

Zeoplant L.L.C. is a company registered in Abu Dhabi and Dubai and is managed by a German, Ralf Stahl who has 27 years experience in the Gulf region and 32 years professional experience. Zeoplant is involved in numerous major projects in the U.A.E., Qatar, Saudi Arabia, Oman, Kuwait, Bahrain, South Africa and Europe in consulting, supplying and implementing to environmental friendly and sustainable landscaping, sports turf & agricultural projects.

The product Zeoplant is a very effective water retaining soil amendment, consisting of fully natural mineral material.

Zeoplant significantly reduces the necessary quantity of irrigation water by 50% because it

- Ties up a high amount of irrigation water and
- Reduces the percolation rate of the irrigation water in the soil
- Reduces the usage of NPK fertilizers drastically by prevention of leaching out
- Improves the soil structure of sandy soils

Zeoplant started its activities in the Gulf in 2003 and established itself as the benchmark and leading supplier of Moisture Retaining Soil Additives worldwide.

Today, Zeoplant is an integral part of the technical specifications of the key landscaping & agriculture consultants in the Middle East.

The increasing demand for saving water, operation & maintenance cost encouraged us to develop a simple, but extremely effective technology in 2017 to implement Zeoplant into existing lawns, sports turf and landscape areas. These latest achievements are already creating a big audience by major clients, developers and facility management companies. ADDC (Abu Dhabi Distribution Company) awarded Zeoplant to retro-fit

2.5 million m² of turf grass in various VIP projects to reduce their irrigation water consumption by 50%.

As water is becoming more and more a precious natural resource, the obligation of saving water for irrigation purposes, whether it's treated, desalinated or natural, is an important task in the design and implementation of all major developments in the region.

Zeoplant combines economical and ecological interests of project owners and developers in a sustainable form.

Zeoplant isn't just a soil additive; it's a commitment to sustainability. For companies seeking eco-friendly solutions, Zeoplant is the answer.

Join us in nurturing growth while preserving nature—one plant at a time. Zeoplant: Your water conservation specialists!

Zeoplant L.L.C.



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