



## REVOLUTIONIZING INTERIOR LANDSCAPING

### WHAT IS VULKAPONIC?

Vulkaponic is an eco-friendly sustainable growing medium used for semi-hydroculture, a modified planting technique. The mineral substrate is a mixture of pumice and high-quality zeolite granules appropriate for tropicals, palms, cacti, succulents, and orchids.

Mined underground, this relatively lightweight substrate has an outstanding water storage capacity of over 30% by volume. It provides optimal air pore volume of more than 35% by volume, and high nutrient storage capacity.

The substrate absorbs all the water during the watering cycle, leaving no water remaining in the pot. The roots slowly absorb the moisture from the substrate. This ensures an excellent moisture balance and exceptional root aeration, which benefit plant health and growth.

### BENEFITS OF USING VULKAPONIC.

#### 1 - ENHANCED PLANT GROWTH

Vulkaponic provides superior growing conditions by ensuring a consistent supply of moisture and oxygen to plant roots. Its stable environment promotes healthier and more robust growth, free from the variability of traditional soil.

#### 2 - CONSISTENCY QUALITY

Unlike traditional soil mixes, which can vary in composition and pH, Vulkaponic is consistent in quality. This reliability ensures that plants thrive, eliminating guesswork and ensuring healthy growth.

#### 3 - MOISTURE RETENTION

The porous nature of Vulkaponic reduces the frequency of watering. Vulkaponic absorbs up to 44% of its weight in water providing sustained moisture to plant roots. This feature provides a safety net of moisture that sustains plants if watering is missed.

#### 4 - EXTENDED SERVICE CYCLES

Vulkaponic's impressive water-holding capacity allows for extended watering cycles. With optimal air pore space and grain sizes between 3 mm and 8 mm, it provides consistent moisture and aeration.

#### 5 - REDUCED RISK OF ROOT ROT

Eliminating soil-borne organic microbes reduces the risk of root rot. When overwatered, Vulkaponic doesn't become waterlogged like soil. It provides aeration, which aids healthy root growth.

#### 6 - PEST REDUCTION

As a sterile medium without organic material, Vulkaponic minimizes the chance of soil-borne gnats and other pests, making it ideal for indoor environments such as offices.

#### 7 - ENVIRONMENTALLY FRIENDLY

Vulkaponic is a sustainable alternative to peat, which takes centuries to form and is not renewable. The stones are reusable, reducing waste and the need for continuous extraction of new materials.

#### 8 - AESTHETIC APPEAL

Vulkaponic's natural appearance is visually pleasing, often eliminating the need for additional decorative top dressings. Decorative elements can also be added for enhanced visual appeal.

# LUFA NORD-WEST

Institute of Soil and Environment Test Report (04.04.2023)



SAMPLE NO.	SAMPLE NAME	VOL-WEIGHT g/l	PH VALUE	Salinity (as KCl) g/l	Nitrogen (N) mg/l	Nitrate (N) (NO <sub>3</sub> -N) mg/l	Ammonium-N (NH <sub>4</sub> -N) mg/l	Phosphate (P <sub>2</sub> O <sub>5</sub> ) mg/l	Potassium (K <sub>2</sub> O) mg/l	Magnesium (Mg) mg/l	Calcium (Ca) mg/l	Sodium (Na) mg/l	Chloride (Cl) mg/l
23GB000816	KLANZ Vulkaponic 3-8 mm 25 liter bag  Sample type, culture substrate	frocks #6 540	CaCl <sub>2</sub> 7.3	H <sub>2</sub> O 0.21  CaSO <sub>4</sub> 0.25	CaCl <sub>2</sub> <10	CaCl <sub>2</sub> <11	CaCl <sub>2</sub> <11	CAL <27	CAL 323	CaCl <sub>2</sub> 33		H <sub>2</sub> O 43	H <sub>2</sub> O 54

Parameter Method	KLANZ Vulkaponic 3-8 mm 25 liter bag
FLL indoor greening principles 2011-07 #5	See Appendix
Grain content d <0.063 mm	3.48 Wt.-%
Grain content d >2 mm	94.24 Wt.-%
Bulk density at WHC max.	48.8 lb./cu. ft.
Bulk density dry	44.3 lb./cu. ft.
Total pore volume	66.8 Vol.-%
Max. water capacity	30.4 Vol.-%
Air capacity at WHC Max	36.4 Vol.-%

Parameter Method	KLANZ Vulkaponic 3-8 mm 25 liter bag
Fluoride (F-) (H <sub>2</sub> O) LUFA North-west 1/1-507 2014-12 #4, #6	< 1.1 mg/l
Cation exchange capacity (T-value) (CEC pot. at pH 8.1) LUFA North-west 1/3-894: 2017-11: #6	2.7 mmolc/100g i.TS
Copper (Cu) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	2.7 mg/kg i.TS
Zinc (Zn) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	110 mg/kg i.TS
Lead (Pb) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	21 mg/kg i.TS
Cadmium (Cd) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	0.12 mg/kg i.TS
Chromium (Cr) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	4.4 mg/kg i.TS
Nickel (Ni) (total) DIN EN ISO 11885(E22). 2009-09 (mod.): #4	4.0 mg/kg i.TS
Thallium (Tl) (total) DIN EN ISO 17294-2 (E29): 2017-01: #4	0.45 mg/kg i.TS
Chromium (VI) DIN 38405-024: 1987-05: #5	< 0.30 mg/kg i.TS

## GRANULAR



Vulkaponic in granular form optimizes the relationship between weight, lightness, and insulating ability. The characteristic spherical granules come in a wide range of sizes (denominations 0/2 - 2/3 - 3/8 - 8/20).

## BULK VULK



45 lbs/per cubic foot (dry) [730 kg/per cubic meter] (ASTM C29)

## ORDERING



### Packaging Options

25 Liter (0.88 cu.ft.) Bag

1500 Liter (53.0 cu.ft.) Bulk Bag

Bulk Vulk shipped by common carrier

### Ordering

vulkaponicusa.com • hello@vulkaponicusa.com

