



# Farm

Substrates for the inner-city  
farmed garden



---

# Crops in the city

••••



Strawberries from the roof terrace or lettuce from the backyard. Growing food locally, exactly where its needed – that's the promise of urban farming. In the morning it might still be in the earth, but maybe in the afternoon it will already be on the table?

Vulkafarm® Plant substrates make it possible to produce healthy food in the city that will still comply with the strict rules of the Fertilisers Ordinance, the Soil Protection Ordinance and the Drinking Water Ordinance.

Because of their lava, pumice, peat and organic aggregate composition, substrates also prevent waterlogging and retain large quantities of water for the growing plants. Rapid rooting and strong growth are the result.

# Product overview



## Vulkafarm mineral

Mineral sub-substrate for farmed garden areas.

on page 92



## Vulkafarm organic

Mineral-organic universal substrate for farmed garden areas.

on page 93



## Vulkafarm plus

Mineral-organic universal substrate with an enriched organic content.

on page 94



Roof



Lawn



Tree



Farm



Tub



Interior



Pond



Building





# Vulkafarm mineral

Mineral sub-substrate for farmed garden areas.

## Details:

- Lava and pumice as base components
- No layer thickness restrictions
- Very well suited for permanent plantings
- Vulkafarm mineral is not fertilized, but can on request be mixed with fertilizer
- Deliverable in sacks, big bags, bulk materials or from a silo truck

## Composition:

Natural product (igneous stone mixture) consisting of augite, olivine, magnetite, limonite and biotite

## Application areas:

- Roof greening
- Tubs
- High beds
- Balcony boxes
- urban farming
- Soil replacement in the event of poor soil conditions
- Mixing component with poor soil conditions

## Additional information:

- Certificates
- Product data sheets

This additional material is available for download at:

[www.vulkatec.de](http://www.vulkatec.de)

### Grain size ( $\phi$ in mm)

0-12

### Particle size distribution

(percentage of total mass in %)

Blowable components	≤10
Fine/medium gravel	30-60

### Volume weight (t/m<sup>3</sup>)

Delivery condition DIN EN 1097-3	0.95-1.00
At max. water capacity, compacted	1.40-1.60

### Water/air balance, compacted

Maximum water capacity	20-30 vol. %
Water permeability mod. K <sub>f</sub>	0.60-150 mm/min

### pH value

6.8-7.5

### Salinity

0.1-1.5 g/l



# Vulkafarm<sup>®</sup> organic

Mineral-organic universal substrate for farmed garden areas.

### Details:

- Basic components: lava, pumice, sand and compost, on request also with peat
- Suitable for permanent plantings
- Vulkafarm 0-4 can be lain up to 45 cm thick Vulkafarm 0-8 can be lain up to 35 cm thick  
For greater laying thicknesses, Vulkafarm mineral can also be used as a mineral sub-substrate
- Vulkafarm 0-4 and 0-6/8 are not fertilized, but can on request be mixed with fertilizer
- Deliverable in sacks, big bags or as bulk
- Vulkafarm 0-4 can also be delivered from silo trucks

### Composition:

Natural product; Eruptive stone mixture, consisting of augite, olivine, magnetite, limonite, biotite, clays of various types, enriched with compost

### Application areas:

- Roof greening
- Tubs
- High beds
- Balcony boxes
- Soil replacement in the event of poor soil conditions
- urban farming

### Additional information:

- Certificates
- Product data sheets

This additional material is available for download at:

[www.vulkatec.de](http://www.vulkatec.de)

	0-4	0-6/8
<b>Grain size</b> (ø in mm)		
<b>Particle size distribution</b> (percentage of total mass in %)		
Blowable components	10-20	10-20
Fine/medium gravel	20-40	20-40
<b>Volume weight</b> (t/m <sup>3</sup> )		
Delivery condition DIN EN 1097-3	0.80-0.90	1.00-1.10
At max. water capacity, compacted	1.25-1.40	1.60-1.85
<b>Water/air balance, compacted</b>		
Maximum water capacity	45-55 vol. %	40-50 vol. %
Water permeability mod. K <sub>f</sub>	0.3-20 mm/min	0.6-20 mm/min
<b>pH value</b>	6.5-7.2	6.8-7.5
<b>Salinity</b>	0.5-1.0 g/l	0.5-1.0 g/l





# Vulkafarm® Plus

Mineral-organic universal substrate for kitchen garden areas with enriched organic content.

## Details:

- Lava, pumice, sand and compost as base components.  
On request also with peat
- Can be laid up to 35 cm thick.  
In the case of larger laying thicknesses, Vulkafarm mineral can be used as a sub-substrate
- Not suitable for permanent plantings
- Compared to Vulkafarm 0-8 it has a higher water retention capacity and an improved nutrient buffering = reduced maintenance requirements + faster growth for many crops
- Vulkafarm 0-8 Plus is not fertilized, but can upon request be mixed with fertilizer
- Deliverable in sacks, big bags or as bulk

## Composition:

Natural product; Eruptive stone mixture, consisting of augite, olivine, magnetite, limonite, biotite, clays of various types, enriched with compost and/or peat

## Application areas:

- Roof greening
- Tubs
- High beds
- Balcony boxes
- Soil replacement in the event of poor soil conditions

## Additional information:

- Certificates
- Product data sheets

This additional material is available for download at:

[www.vulkatec.de](http://www.vulkatec.de)

### Grain size (ø in mm)

0-6/8

### Particle size distribution

(percentage of total mass in %)

Blowable components	10-20
Fine/medium gravel	20-40

### Volume weight

(t/m<sup>3</sup>)

Delivery condition DIN EN 1097-3	0.95-1.10
At max. water capacity, compacted	1.60-1.85
Runoff curve number C	

### Water/air balance, compacted

Maximum water capacity	45-60 vol. %
Water permeability mod. K <sub>f</sub>	0.3-15 mm/min

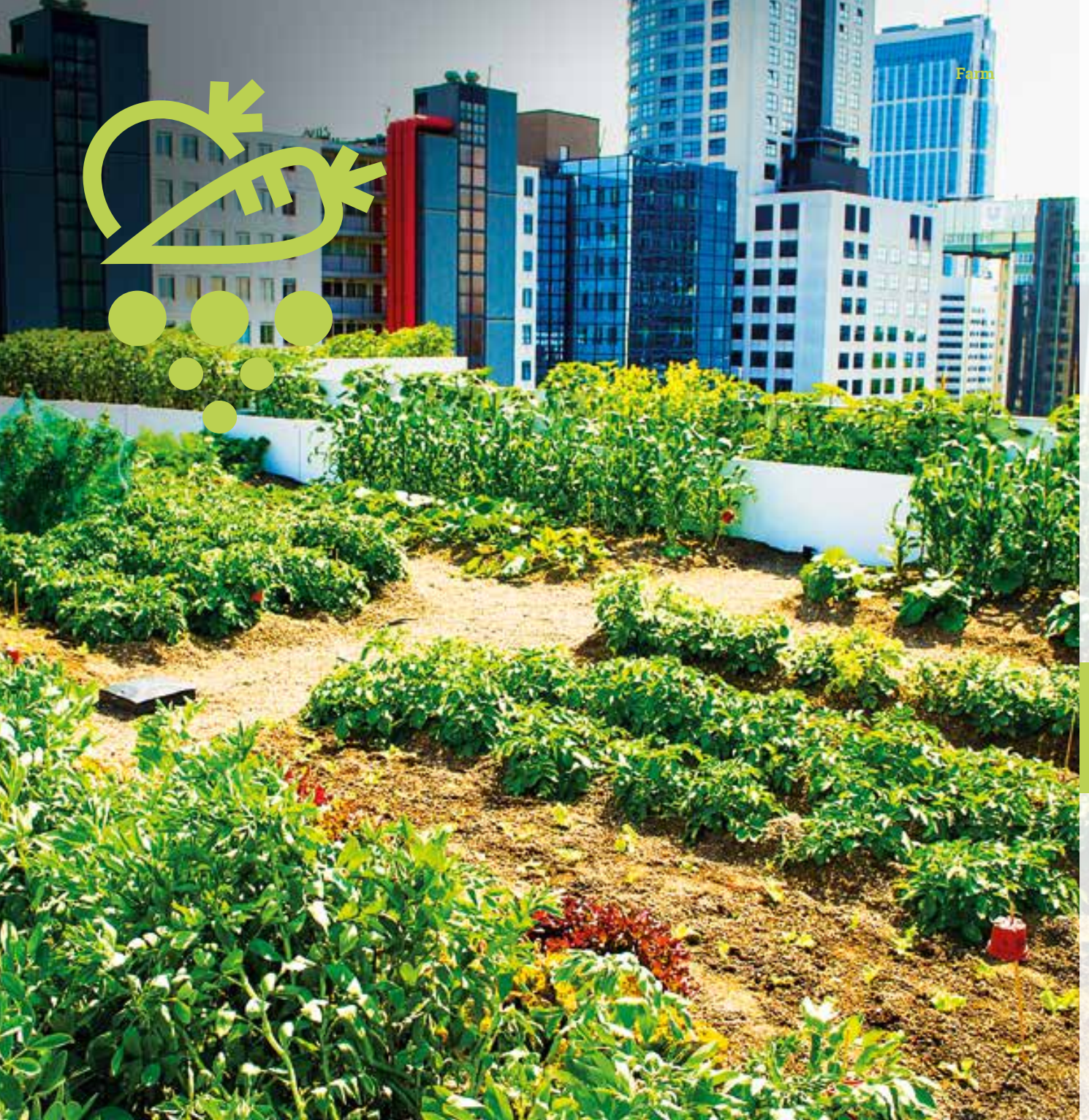
### pH value

6.0-7.5

### Salinity

0.5-1.0 g/l





Farm



Roof



Lawn



Tree



Farm



Tub



Interior

Source: Optigreen International AG

Experimental fruit and vegetable farm on a roof.



Pond



Building