

# GROWING MEDIA FOR LIVING ROOFS AND ROOFTOP FARMING SYSTEMS



## TOP LEAF ROOF FARM BLEND

Our Full Farm Blend is an engineered soil for ground level and rooftop farming with optimal organic matter and nutrient content to meet the special requirements for food production. **TopLeaf® growing medium** is a precisely balanced blend of light weight mineral aggregates sourced regional like LavaRox® and pumice and premium organic components of OMRI certified compost, BIO365 bioCoco® and BlackOwl® biochar - complying with the following requirements:

### Particle Size Distribution

|                                             |        |      |
|---------------------------------------------|--------|------|
| Proportion of silting components < 0.063 mm | Mass % | < 4  |
| Proportion of particles < 0.25 mm 60 mesh   | Mass % | 4.2  |
| Proportion of particles < 1.00 mm 18 mesh   | Mass % | 15.5 |
| Proportion of particles < 3.20 mm 1/8 inch  | Mass % | 25.6 |
| Proportion of particles < 6.30 mm 1/4 inch  | Mass % | 30.2 |
| Proportion of particles < 9.50 mm 3/8 inch  | Mass % | 21.5 |

### Density Measurements

|                                               |                    |      |
|-----------------------------------------------|--------------------|------|
| Bulk Density (dry weight basis)               | lb/ft <sup>3</sup> | 37.8 |
| Bulk Density (at max. water-holding capacity) | lb/ft <sup>3</sup> | 80.7 |

### Water/Air Measurements

|                                                       |        |             |
|-------------------------------------------------------|--------|-------------|
| Total Porosity                                        | Vol. % | 62.9        |
| Water Retention (% of dry weight)                     | Vol. % | 65          |
| Air-filled porosity at max water-holding capacity     | Vol. % | 33.4        |
| Water Availability                                    | Vol. % | 27.3        |
| Water permeability (saturated hydraulic conductivity) | in/min | 0.06 – 0.94 |

### pH and Salt Content

|                                  |           |       |
|----------------------------------|-----------|-------|
| pH                               |           | 6.3   |
| Soluble salts (water, 1:10, m:v) | g (KCl)/L | < 2.4 |

### Organic Measurements

|                                           |        |      |
|-------------------------------------------|--------|------|
| Organic matter content                    | Mass % | 22.8 |
| Carbon : Nitrogen ratio                   | 16:1   | <20  |
| TEC Capacity (Total exchangeable Cations) | meq/kg | 159  |

### Nutrients / Plant available

|                    |         |      |     |       |
|--------------------|---------|------|-----|-------|
| Nitrogen N (NO3-N) | High    | 4    | ppm | 447   |
| Phosphorus, (P)    | High    | 4    | ppm | 268   |
| Potassium, (K)     | High    | 13.6 | ppm | 4,261 |
| Magnesium, (Mg)    | Optimal | 2.1  | ppm | 912   |
| Calcium (Ca)       | Low     | 0.2  | ppm | 663   |

All values are based on compacted materials according to laboratory standards and testing methods defined by The German Landscape Research, Development and Construction Society (FLL) 2012, and the USDA, CCOF and OMRI organic certification standards for food growing soil based medium.

All Density Measurements reflect typical ranges for the respective Top Leaf products.

This is detailed information for the San Francisco Bay region and lab specific analysis, please inquire for our latest test results.

Nutrients of newly blended products will temporarily exceed upper limits. Consistent nutrient values will typically be achieved soon after installation.

The details contained in these specifications correspond with Top Leaf Farms technical knowledge at the time of publication. Top Leaf Farms reserves the right to update and adjust performance specifications from time to time in accordance with new insight and to modify the named properties of the product.

#### Supplier:

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