

**Benedict SmartMix™5 – Lightweight Planter Box Subsoil**

**Product Code**

RO133 

**Source**

BENEDICT Moorebank

**Disclaimer**

The product data contained in this Product Data Sheet is applicable to Benedict Sand & Gravel materials and is current at the time of publication. Benedict Sand & Gravel reserves the right to vary product specifications without notice. The data contained within this sheet supersedes all previous information.


**Description**

Benedict **SmartMix™ 5** is a lightweight mix based on high quality mineral matter that creates a structural framework that is not subject to decomposition. This overcomes problems with slumping and the resulting loss in aeration and drainage efficiency. Whilst the mineral matrix is structurally sound it has good water holding capacity and a high cation exchange capacity.

**SmartMix™ 5** is engineered for use at depths below 300mm in planter boxes and containers. It is designed to be installed beneath Benedict **SmartMix™ 4** Lightweight Planter Box Mix. This combination exhibits excellent physical compatibility to avoid potential problems from perched water tables and particle migration.

The mix consists of high quality mineral matter with a low fines (i.e. clay/silt) content. This creates a permanent structural framework for long-term optimal plant growth.

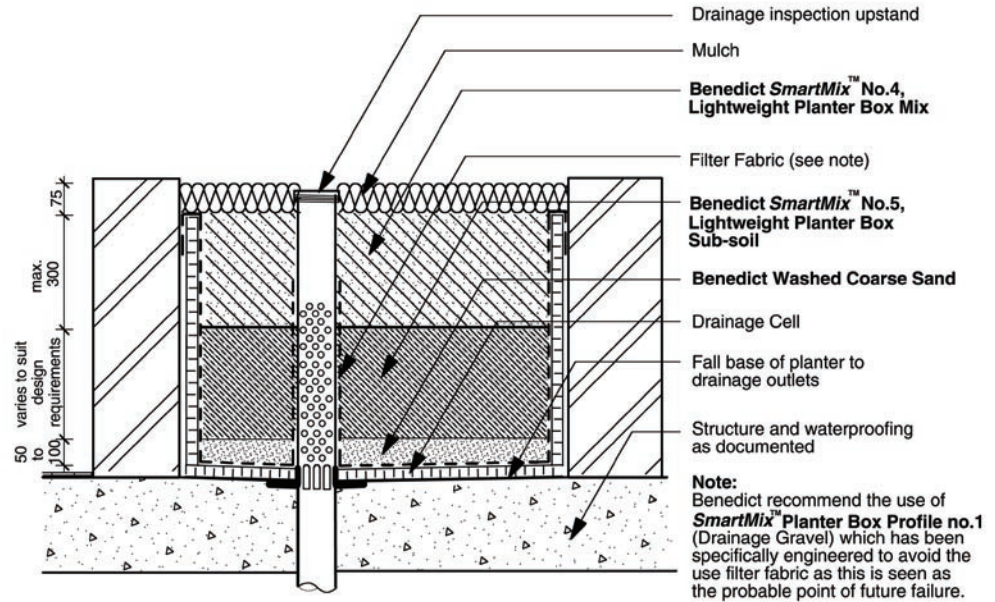
The **SmartMix™** range of soil mixes are performance based.

 denotes recycled product containing man-made objects such as but not limited to glass and plastic.

**Benedict SmartMix™5 – Lightweight Planter Box Subsoil Contd.**

**Uses** *SmartMix™ 4* is designed to provide ongoing optimum growing conditions for a broad range of plant species. It is specifically engineered for use in planter boxes on slab and containers where weight is a critical consideration.

- Benefits**
- 1% by mass organic matter to avoid anaerobic conditions developing. Organic matter is restricted to the top 300mm and confined to *SmartMix™ 4*.
  - High porosity allows for easy root expansion, good aeration and good drainage
  - Lightweight (low bulk density for suspended slab installation)
  - Non-slumping (maintains soil volume)
  - High cation exchange capacity to capture plant nutrients as they leach through the soil profile
  - High porosity allows reduces the impact of root heave



**Figure 1.** Benedict *SmartMix™* Planter Box Profile 2 (Drainage Cell)

**Benedict SmartMix™5 – Lightweight Planter Box Subsoil Contd.**

**Characteristics**

PHYSICAL PROPERTIES	TYPICAL RESULT	ACCEPTABLE RANGE (AS4419)
<b>Particle Size</b>		
<10mm	96.2%	
10-20mm	3.8%	<8
>20mm	0%	<2
Bulk Density	1.0kg/L	>0.7
Permeability	13.5cm/hr	2-100
Wettability	N/A	
Organic Matter	0%	3-15
Toxicity	107%	>70

**Texture  
Moisture Content**

Decomposed matter in a matrix of loamy soil  
 Not to exceed 10% by mass (AS1289)

**Transport & Placement**

Ensure that the material remains moist at all times during transport and placement.

Material may be discharged from the truck into stockpiles or directly into the location where it will be finally used.

If drying or particle segregation occurs the material must be remoistened and mixed prior to placement to achieve a homogenous blend of all components.

Each truckload of material is delivered with a delivery docket identifying the material type and the tonnage of material delivered.

## Benedict SmartMix™5 – Lightweight Planter Box Subsoil Contd.

### Safety & Handling

#### Description

This product is partially composed of decomposed organics that contain a variety of living microorganisms which could include fungi, protozoa and a wide range of bacteria.

#### Risk

Inhalation of dust and/or liquid mists may irritate, inflame or sensitise the nose, throat and lungs resulting in illnesses ranging from hay fever or asthma to pneumonia-like illnesses. Direct contact with this material or this dust and/or liquid mists (bioaerosols) may cause skin irritation (dermatitis) and skin or eye infection or irritation. People particularly at risk are those suffering from asthma or allergies, and those with weak immune defence.

#### Safety

Avoid contact with eyes and skin. Avoid breathing dust/and or liquid mists (bioaerosols). Wear suitable protective clothing and standard duty gloves (AS 2162.2). If exposed to dust and/or liquid mists, wear dust resistant eye protection (AS/NZS 1336) and a particulate respirator (AS/NZS 1715 and 1716). Wash thoroughly immediately after handling. Wash work clothes regularly. Clean up by wet sweeping or vacuuming.

#### First Aid

Irrigate eyes with plenty of water for 10 minutes. Wash skin with soap and water. For inhalation, remove to fresh air. Seek medical attention for any persistent skin, eye or respiratory symptoms.

**Note:** Please refer to the appropriate Material Safety Data Sheet for more specific safety and handling information.

### Alternative Products

Fine Washed Sand, Coarse Washed Sand, Sand/Soil Blends, Horticultural Grade Ash

### Technical Enquiries

#### BENEDICT SAND & GRAVEL

ABN 99 073 763 292

ph: (02) 9986 3500

fax: (02) 9986 3555

email: [sales@benedict.com.au](mailto:sales@benedict.com.au)

web: [www.benedict.com.au](http://www.benedict.com.au)

post: PO BOX 875 ST IVES NSW 2075