

## SPECIFICATION SHEET

# QUANTUM-VSC®

## Beneficial Soil and Plant Microbial Inoculant

### DESCRIPTION

Quantum-VSC is a plant and soil inoculant that restores and enhances the foundational levels of soil biology (also known as the soil food web). This product incorporates heterotrophic bacteria into a diverse microbial formulation that provides unprecedented plant enhancement at foliar, root and rhizosphere. The addition of humate material to the formulation provides a readily usable carbon source.

### PERFORMANCE CHARACTERISTICS

When used as a foliar or soil application, Quantum-VSC directly impacts plant vigor and performance by:

- Improving nutrient uptake
- Improving plant photosynthesis
- Improving root and shoot growth
- Fortifying plant natural defense systems
- Promoting water production and retention

### PRODUCT CHARACTERISTICS

Highly concentrated – Provides over 60 million colony forming units per milliliter.

Safe and easy to use - Non-toxic and contains non-pathogenic bacteria. It may be applied as a root drench or as a foliar (diluted 10:1 with water) and is compatible with most types of irrigation systems to include: speed sprayer, boom sprayer, pivot irrigation, aerial spray, micro-jet, etc.

No re-entry restrictions.

Easy storage – Does not require refrigeration.

Long life – Shelf stable for 3 years (unopened) and 1 year (opened).

### Properties

#### Guaranteed Bacterial Analysis:

<i>Rhodopseudomonas palustris</i>	500,000 cfu/mL
<i>Bacillus amyloliquefaciens</i>	30,000,000 cfu/mL
<i>Bacillus subtilis</i>	15,000,000 cfu/mL
<i>Bacillus licheniformis</i>	750,000 cfu/mL
<i>Bacillus megaterium</i>	7,500,000 cfu/mL
<i>Bacillus polymyxa</i>	7,500,000 cfu/mL

#### Fertilizer Analysis:

No NPK; fertilizer analysis of 0-0-0

#### pH:

6.5-8.0

#### Specific Gravity:

1.04 approximately

#### Particle Size:

100% through 100 micron/140 mesh

#### Appearance:

Brown/Black liquid

#### Odor:

Pungent and distinctive earthy odor

**Properties (cont.)**

---

**Packaging:**

Plastic 1 gallon bottles, 5 gallon totes, 30 gallon & 55 gallon drums and 275 gallon totes (mini-bulks)

**Storage/handling:**

Shake/agitate before use. Re-cap as soon as possible. Store between 32°F/0°C and 110°F/43°C.

**DIRECTIONS FOR USE**

**Row Crops** – 64 oz per acre at planting; 64 oz per acre at 14 to 21 days post planting; 64 oz per acre prior to full canopy.

**Grains (Irrigated)** – 64 oz per acre at planting; 64 oz per acre at seed head development.

**Grains (Non-irrigated)** – 1 gallon per acre at planting.

**Turf (Golf)** – Initial application of 8 oz per 1,000 ft<sup>2</sup> on tees and greens; 4 oz per 1,000 ft<sup>2</sup> every 14 days.

**Turf (Sod & Sport)** – Initial application (including at planting) 1 gallon per acre; 64 oz every 30 to 45 days.

**Vegetables (Greenhouse)** – Water in seeds with 4 oz per gallon.

**Vegetables (Outplanting)** – Root dip or drench with 4 oz per gallon; 64 oz per acre every 14 to 21 days.

DO NOT MIX WITH FUNGICIDES OR PESTICIDES. When tank mixing, add the Quantum-VSC last and apply within 0 to 12 hours.

For crop specific application rates and timing, visit [www.GrowQuantum.com/product-application-rates.aspx](http://www.GrowQuantum.com/product-application-rates.aspx).

