

VSTEARIN™ Veg Stearic Acid

Elevate Candle Vibrancy to New Heights



Vegetable-Derived Stearic Acid

INCI : Stearic Acid

CAS : 67701-03-5 / 57-11-4

EC : 200-313-4

Enhance candle stability

Prevent bending & warping

Raise the candle's melting point

Add hardness and malleability

Contribute to the opacity of the wax

Enhance color vibrancy

VSTEARIN Veg Stearic Acid is a premium vegetable oil derivative designed for candle applications.

Vantage continues to innovate and expand to meet the needs of our customers, now offering additional sustainable alternatives with the broadening of our plant-based product line. Maintaining excellence in quality, performance, and delivery for our customers is our top priority.

Our **VSTEARIN Veg Stearic Acid** is manufactured in the U.S. Midwest (Illinois), which is centrally located to better serve our U.S. customers. **VSTEARIN Veg Stearic Acid** plays a crucial role in enhancing the quality and performance of candles, offering manufacturers the ability

Features:

VSTEARIN Veg Stearic Acid is commonly used alongside paraffin wax to **enhance candle stability** and prevent bending or warping, especially in warm weather conditions.

Paraffin wax is the main ingredient in candles; however, paraffin candles can suffer from bending in warm weather. By adding **VSTEARIN Veg Stearic Acid** to the wax mixture, manufacturers can raise the candle's melting point and add hardness and malleability to the finished wax, **improving its stability and durability**. Blending components with different melting points in the wax, results in improved and more consistent performance when molding the candle. **VSTEARIN Veg Stearic Acid** is equally suitable for use in both soy and coconut candle formulations.

Recommended Applications



Candles and Spa Candles

 Vantage®

VSTEARIN™ Veg Stearic Acid



VSTEARIN Veg Stearic Acid is a flaked ingredient compatible with a range of wax varieties, including paraffin, soy, palm, coconut, and beeswax. It is especially effective when paired with paraffin wax, as it enhances hardness and elevates the overall quality of paraffin candles.

When incorporating **VSTEARIN Veg Stearic Acid** with alternative wax options, we recommended conducting small-scale trials to determine the ideal proportions necessary for attaining the desired attributes.

Recommended Use in Candle Production

Determination of Optimal Percentage: Determine the optimal percentage of **VSTEARIN Veg Stearic Acid** to be added to the wax mixture based on the desired characteristics of the candles. Typically, paraffin candles consist of **5 to 10% stearic acid**, although this can vary depending on specific requirements and candle types.

Melting and Mixing Process: Heat the wax and **VSTEARIN Veg Stearic Acid** mixture to the appropriate temperature to ensure thorough melting and homogenization. Stir the mixture continuously to achieve a uniform distribution of stearic acid particles throughout the wax.

Temperature Control: Maintain precise temperature control throughout the melting and mixing process to prevent overheating and degradation of the wax and **VSTEARIN Veg Stearic Acid**. Monitor temperature levels accurately.

Testing and Adjustment: Conduct small-scale trials to test different **VSTEARIN Veg Stearic Acid** percentages and wax formulations. Evaluate the burning characteristics, stability, and appearance of the candles to determine the optimal blend for your specific requirements.

Consideration of Candle Type: Tailor the **VSTEARIN Veg Stearic Acid** concentration based on the type of candles being produced. For non-drip candles, different percentages of stearic acid may be used for the inner and outer layers to control melting and dripping.

VSTEARIN™ Veg Stearic Acid

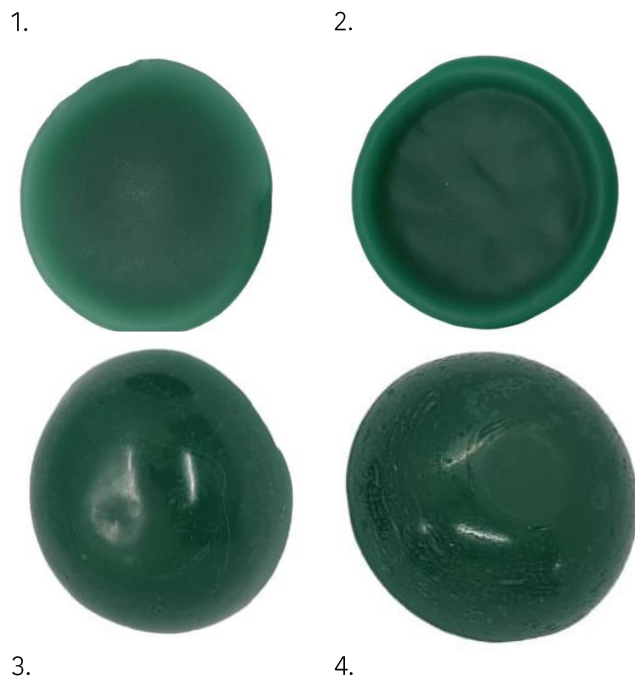


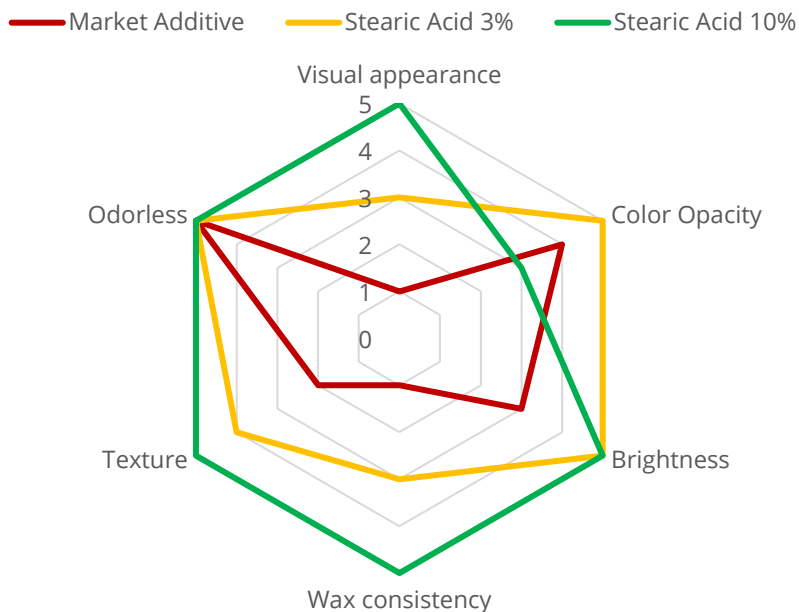
Fig 1. Top side, paraffin wax with VSTEARIN veg stearic acid SV11 at 10% of concentration.

Fig 2. Top side, paraffin with commercial additive at recommended level of dose.

Fig 3. Back side in contact with mold, VSTEARIN veg stearic acid SV11 10%.

Fig 4. Back side in contact with mold, Commercial additive.

Candles Features



Graph 1. The graph demonstrates VSTEARIN Veg Stearic Acid SV11 when it's used within the recommended dosage range at 3% and 5% compared to a commercial additive at the recommended 1% use level.

The tests conducted in Vantage laboratories show how the overall performance of paraffin improves with **VSTEARIN Veg Stearic Acid SV11** added as an additive at the two tested concentrations, 3% w/w and 5% w/w respectively, compared to the commercial additive used. What we observed with our VSTEARIN veg stearic acid SV11 is that starting from 3%, it acts as an enhancer of the visual appearance, texture, brightness and color opacity of the paraffin, and as the product is added in greater proportion, it improves the appearance of the wax.

Vantage **VSTEARIN Veg Stearic Acid SV11** stands out as an additive in candle production due to its multifaceted benefits. In comparison to other additives in the market, stearic acid offers superior performance across various essential aspects of candle making. Notably, it enhances the opacity and final color of candles, providing a visually appealing aesthetic.

Moreover, stearic acid contributes to improved wax yield and burn time, ensuring a longer-lasting and more efficient candle. Its versatility shines through, with optimal results achieved at varying concentrations, catering to diverse customer preferences. Whether for molded candles or those designed for prolonged use, stearic acid proves its efficacy, making it a preferred choice for discerning candle makers seeking superior quality and performance.

Domestic Production / Natural Feedstocks



Vantage is one of the largest suppliers of fatty acids in North America. Derived from natural plant feedstocks, our **VSTEARIN Veg** range of Stearic Acids is manufactured at our facility in the U.S. Midwest, ensuring swift delivery and reliable availability for our customers.

VSTEARIN Veg Stearic Acid SV11

Appearance:	White Waxy Solid at room temperature
Odor:	Characteristic, mild fatty odor
Acid Value:	205-212 mg KOH/g
Iodine Value:	1.0 g I/100g Max.
Titre Point:	54-57 °C 129.2 – 134.6 °F
Packaging:	Bulk/Big Bags Flaked form available in 50 Lb (25 kg). bags and big bags

VSTEARIN Veg Stearic Acid SV10

Appearance:	White Waxy Solid at room temperature
Odor:	Characteristic, mild fatty odor
Acid Value:	202-210 mg KOH/g
Iodine Value:	1.0 g I/100g Max.
Titre Point:	56-61 °C 132.8 – 141.8 °F
Packaging:	Bulk/Big Bags Flaked form available in 50 Lb (25 kg). bags and big bags

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