

Candle Waxes and Additives

Candle making is as much an art as it is a science. Reed Wax will work with you to determine which wax, or combination of waxes, will best suit your candle making needs. We sell only top quality waxes and additives. We do not sell "off-spec" waxes you may find elsewhere. All of our waxes and additives must meet strict quality control guidelines.

We offer semi and fully refined paraffins, paraffin blends, pre-blended candle waxes and wax additives. Please contact our sales department at (781) 944-4640 for pricing information and/or samples.

Refined Paraffins

<u>Product</u>	<u>Melting Point</u>	<u>Oil Content</u>	<u>Penetration</u>	<u>Application</u>
89040	120 - 125°F	3% MAX	50 MAX	Base wax for Container Candles
89041	126 - 130°F	0.5% MAX	18 MAX	Base wax for Container or Votive Candles
89042	130 - 132°F	0.5% MAX	18 MAX	Base wax for Votive, Pillar or Molded Candles
89044	141 - 144°F	0.5% MAX	14 MAX	Base wax for Molded Candles
89045	152 - 157°F	0.5% MAX	15 MAX	Base wax for Molded or Taper Candles

Paraffin Blends

<u>Product</u>	<u>Melting Point</u>	<u>Oil Content</u>	<u>Penetration</u>	<u>Application</u>
2000-80	128-133°F	0.5% MAX	13 Typical	A specific paraffin blend (no additives) designed for Votive or Container candles. Greater than 4% fragrance may require addition of additives.
2000-82	129 - 133°F	2.5% MAX	18 Typical	A specific paraffin blend (no additives) designed for Mottling Container candles. Pour between 180-195°F. Higher fragrance levels yield better mottling, but levels above 6% may result in surface oil.
2000-83	138 - 142°F	0.5% MAX	11 Typical	A specific paraffin blend (no additives) designed for Mottling Pillar, Votive or Taper candles. Pour between 180-195°F. Higher fragrance levels yield better mottling, but levels above 6% may result in surface oil.

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The information contained herein is believed to be true and reliable. There are no warranties, representations or conditions, expressed or implied of any kind for fitness for any particular purpose. The purchaser / user should independently undertake sufficient testing to confirm the product validity and suitability. The purchaser / user assumes all risks and liability in conjunction with the use of these products. The information supplied by Roger A. Reed Inc. shall not be construed as permission to license to operate under, or recommendation to infringe any existing or pending patent, patent applications or trademarks.

Pre-Blended Candle Waxes

The following waxes have been pre-blended with all necessary additives. Additional additives may be needed only if you are loading candles with extremely high amounts of fragrance.

<u>Product</u>	<u>Melting Point</u>	<u>Oil Content</u>	<u>Penetration</u>	<u>Application</u>
2001-112	120 - 128°F	Not Applicable	160 Typical	ONE-POUR Container Candle blend. Fragrance retention up to 10%. Pour between 175 - 185°F.
2000-84	120 - 129°F	2.0% Typical	30 Typical	Container Candle blend. Typical fragrance retention of 6-10%. Pour between 160 - 180°F.
2000-85	125 - 131°F	0.4% Typical	12 Typical	Votive Candle Blend. Typical fragrance retention of 3-6%. Pour between 165-185°F.
2000-86	137-147°F	0.4% Typical	13 Typical	Pillar or Taper Candle Blend. Typical fragrance retention of 3-6%. Pour between 165-185°F.

Additives

Beeswax – Yellow: Product #89054, White: Product #89055, Crude: Product #89058

Beeswax can be added to paraffin to increase its melting point, which will lengthen the burn time of a candle. Beeswax will also add a sweet natural scent to the candle.

EVA – Product #89028

Ethyl Vinyl Acetate is used to impart hardness and strength to a candle. This additive is typically used to strengthen dipped taper candles. It is not recommended for molded candles since it tends to cause the wax to adhere to metal molds. EVA is a rubbery plastic like material that takes time to blend into a wax. We do not recommend its use unless added strength is needed. EVA will prevent mottling. Use is typically limited to less than 4%.

Microcrystalline

Fragrance Holdout – Product #6884

Microcrystalline Wax is used for fragrance holdout. This will help prevent “wet spots” in container candles when a high concentration of fragrance is used and will prevent mottling. Use should be limited to 2% or less. Higher concentrations may hinder fragrance release.

Beeswax Substitute – Product #79024

Used as a low cost substitute for beeswax. Beeswax Substitute can be added to paraffin to increase its melting point, which will lengthen the burn time of a candle. The addition of too much Beeswax Substitute can add to excessive soot formation. Note: Beeswax Substitute DOES NOT smell like beeswax.

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Mineral Oil – Product #98107

Used to aid adhesion of the wax to the container or to lower the melting point of a wax blend. Usually a 6-8 % mineral oil / fragrance combination is ideal for wax adhesion to the container. Excessive use will generate soot when the candle is burned. Mineral Oil helps promote mottling in waxes designed to do so.

Petrolatum – White Petrolatum: Product #88127, Blonde Petrolatum: Product #76060

Used to aid adhesion of the wax to the container or to lower the melting point of a wax blend. Petrolatum will add a creamy look to a container candle. Excessive use will generate soot when the candle is burned.

Polyethylene – Product #89060

Polyethylene Wax (Luster Crystals) is used to add a glossy surface to pillar, votive, and other molded candles. This will increase candle hardness and will effect the candle burn rate. A larger than typical wick is usually necessary when using Polyethylene Wax as an additive. Addition will also help with color distribution. Polyethylene Wax will prevent mottling. Use should be limited to less than 2%.

Stearic Acid – Product #76016

Addition of Stearic Acid will add opacity to candles. Stearic Acid will also harden the wax and acts as an internal mold release for molded candles. Typical concentrations are up to 10%. At high concentrations, Stearic Acid may contribute to color fading and discoloration. Stearic Acid may be used to control the amount of mottling. Concentrations greater than 10% will typically prevent mottling. Adding approximately ½% may also help in fragrance release when a candle is solid. Stearic Acid will also aid in fragrance holdout for container candles (see Microcrystalline). Excessive use will generate soot when the candle is burned.

Vybar 260^o - Product #98114

Used to aid in even color distribution. Vybar 260 also increases the hardness of a candle. Adding approximately ½% may help in fragrance release when a candle is solid and will prevent mottling. Typical usage is up to 4%.

General

Burn Rates

Burn rates are determined by the wax used, candle size and wick selection. Generally the larger the candle and the higher the melting point of the wax, the longer it will burn. Addition of small amounts of additives such as Stearic Acid, Microcrystalline Wax, Polyethylene Wax and Beeswax; can greatly increase the life of a candle.

Fragrances

Fragrances added to un-modified paraffin will typically bleed when added in 5-8% concentrations (see Additives for more information). Unless a wax blend has been specifically designed for a heavy scent addition, there is usually no benefit from the addition of greater than 8% fragrance in a candle. Typically fragrances a candle maker buys are actually diluted concentrates carried in an oil base. The oils that fragrance suppliers use to dilute the concentrates are numerous. These oils can greatly affect the burning rate of a candle. It would be wise to look at similar fragrances from a few suppliers to find the one that works best with your wax blend.

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Mottling

There are specific waxes formulated to impart mottling (snowflake like crystals) in a candle. Additives such as Vybar[®], EVA, Polyethylene and Microcrystalline waxes have been found to prevent or greatly decrease the amount of mottling at concentrations as low as ¼%. Stearic Acid can be used in limited concentrations (see Additives).

Wicks

Proper wick size and type is critical in producing a quality candle. Choose a wick that will supply enough heat to create a full melt pool on the surface of the candle. Using a wick too small will cause the candle to burn down into the wax eventually snuffing out the flame. A wick too large will unnecessarily increase the burn rate of the candle and can also cause excessive smoking and soot formation.

Ordering Information

Reed Wax office hours are Monday through Friday from 8:00 am to 5:00 pm (EST). The standard lead time for in stock items is two business days. All orders are shipped FOB, Reading, MA. UPS shipments are prepay & add. There is a \$25.00 minimum on all orders. Cash, Money Orders, Mastercard and Visa are accepted.

Safety

It is very important that you read and understand the MSDS (Material Safety Data Sheet) for all products you work with. An MSDS provides you with specific information on how to safely use the product. If you require an MSDS for a Reed Wax product you have purchased, please call us at (781) 944-4640 and we will promptly provide you with one.

Always remember to wear your Safety Goggles!

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