

Technical Data Sheet – Soy Wax Container

Information

Product Description

This product is a blend specifically developed for the production of container candles. It is suitable for further blending with fragrances and oil soluble dyestuffs. This product is biodegradable and vegan friendly. No animal products are used and no animal testing has been carried out in its manufacture.

Due to the prevalence of genetically modified soybean crop in the market we are unable to guarantee entirely non-GMO sources, but we aim to source non-GMO wherever possible.

Physical Properties

<u>Test</u>	<u>Method</u>	<u>Specification</u>	<u>Typical</u>
Congearing Point °C	ASTM D938	34-42	39.0
Melting Point °C	IP371	42-48	45.5
Viscosity @ 100°C	ASTM D445	9-11	9.7cSt
Penetration @ 25°C	ASTM D1321	40-80	60dmm
Colour	ASTM D1500	1.0 Max	0.6

Manufacturers Notes

This product does not require additives, other than fragrance and colour required by the Candle maker. Old or partial candles may be remelted and the wax reused although it is advisable not to heat the wax above 85°C or heating for extended lengths of time. Waxes should be stored in a cool, dry location away from direct heat, sunlight and moisture.

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Containers

Containers should be clean and free of contaminants. Containers should be at least at room temperature, although pre-heating the containers to approx. 45 - 50°C can be beneficial.

Colour

Most dyes work with this product; powder, liquid, chips, blocks, etc. When using powder dyes, heat the wax to approx. 75°C, add the dye and mix until dissolved. Powder dyes may also be dissolved in fragrance and then added to the melted wax, be sure the dye has dissolved completely before adding. When using powder dyes dissolved in fragrance, liquid dyes, colour blocks, chips or no dye heat the wax to 70°C. If you wish to make your candle darker or “richer”, add a little black dye to the colour you are using.

Fragrance

This product may be used with fragrance at levels up to 10-12%, however fragrance which is specifically developed for use with natural waxes is highly recommended. Burn pool size and depth greatly affect fragrance throw so correct wicking is paramount. Some fragrances may react poorly with the wax causing bleeding, objectionable surface finishes or poor flame quality. This has been found to be exaggerated when using fragrances specifically designed for use in Paraffin wax candles.

Wicking

Natural waxes tend to require larger wick sizes than traditional paraffin waxes. Fragrance, colour and candle configuration have a great impact on the best wick choice. Too large of a wick may cause sooting, accelerated burn times and guttering (wax leaking through the side of the candle). Too small a wick will cause tunnelling and produce a smaller flame. Keep wicks trimmed to ¼ inch. If you experience poor flame quality or stability, try a different type of wick. Test burning should be done after the candle has had a chance to sit for 48 hours after pouring.

Melting

Temporary high temperatures (up to 90°C) have no adverse effect as long as the wax is cooled back down quickly. Higher temperatures may cause the wax to discolour. Allow the wax to cool to your desired pour temperature, add the fragrance and mix well. Be

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sure to stir/mix the wax while melting. Avoid using containers containing copper and zinc as this may accelerate discolouration. Stainless Steel is the material of choice although mild steel is acceptable. Digital temperature probes are readily available and are a safer choice than the traditional Mercury in glass type.

Pouring

Pour temperatures may vary according to mould type & size, fragrance & dye used and the effects the candle maker wishes to achieve. Greater adhesion to containers can be achieved by pouring at temperature close to congealing point (approximately 45 - 55°C). Fragrance should be added and mixed immediately prior to pouring where practical. If you experience difficulties with your pour temperature, try a lower or higher temperature in increments of 5 - 10°C. Consider pouring into pre heated moulds for better adhesion to glass containers.

Double-Pour

This product is formulated to require only a single pour in most containers however, for some large containers; a top-up is required to achieve the best candle surface. A small amount of wax at a slightly warmer temperature than the candle was poured at can be used to top-up the candle before the candle is fully cool (pouring the top-up once the candle is completely cool may result in a reduction of adhesion to the container).

Candle Cooling

Cool undisturbed candles at room temperature (about 25°C). Candles should be allowed to sit undisturbed for 48 hours before test burning.

Test Burn:

Check wicking. Test burn the candle for burn pool diameter and “mushrooming” after it has cooled for 48 hours. Mushrooming is when carbon and/or other substances build up on the end of the wick interfering with combustion. Mushrooming can cause sooting and poor odours. Try different wicks until you have your desired burn pool diameter and a good clean flame.

Every combination of container, wax, dye, fragrance and wick must be tested for burn quality.

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