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TDS – KeraSoy Pillar

Information

Product Description

KeraSoy Pillar is a blend specifically developed for the production of Pillar candles. It is suitable for further blending with fragrances and oil soluble dyestuffs.

Physical Properties

Test	Method	Typical
Congealing Point	ASTM D938	41.0°C
Melting Point	IP371	60.0°C
Viscosity @ 100°C	ASTM D445	9.5cSt
Penetration @ 25°C	ASTM D1321	27 dmm
Colour	Visual	Off White to pale cream

Manufacturers Notes

KeraSoy Pillar 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 but 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.

Moulds

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

Colour

Most dyes work with KeraSoy Pillar; 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 that the dye has dissolved completely before adding. When using powder dyes dissolved in fragrance, liquid dyes, or colour blocks 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

KeraSoy Pillar has been designed for fragrance at levels between 5 - 10%. 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 tunneling 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 sure to stir/mix the wax while melting. Avoid using Pillars 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 release from the moulds may be achieved by pouring at temperature of around 55 - 65°C, although this will be dependent upon the size and shape of the candle being produced. 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 enhanced release properties

Double-Pour

KeraSoy Pillar is formulated to require only a single pour, however for some large Pillars; 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 Pillar).

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 size, wax, dye, fragrance and wick must be tested for burn quality