



441 DeGroate Rd., New Lenox, IL 60451
 815-462-0939 Fax: 815-485-1194
www.dpswax.com
 email: info@dpswax.com

DPS/MORRIS WAX
 A Division of Saco Petroleum

9807 Kaw Drive, Edwardsville, KS 66111
 913-948-6220 Fax: 913-948-6242
www.sacopetroleum.com



500 N. National, Springfield, MO 65804
 417-869-7333 Fax: 417-831-4671
www.morriswax.com
 email: ghudson@morriswax.com

6095/R9542 Velvet Container Blend

Velvet CB is a specialty formulation of vegetable and petroleum derived waxes suitable in consistency to be used for the manufacture of container candles.

PHYSICAL PROPERTIES

TEST METHODS	ASTM METHOD	SPECIFICATIONS		TYPICAL
		Minimum	Maximum	
Congealing Point °F (°C)	D938	120 (48.9)	130 (54.4)	125 (51.7)
Kinematic Viscosity, cSt @ 210°F (98.9°C)	D445	5.7	6.7	6.3
Saybolt Viscosity, SUS @ 210°F (98.9°C)	D2161	44.9	48.1	46.9
Saybolt Color	D1500	----	0.5	L0.5
Odor	D1833	----	----	0.5
Needle Penetration, dmm @ 77°F (25°C)	D1321	----	----	23

Product Type	Paraffin and vegetable wax blend
Properties (Typical)	Congealing Point (ASTM D938): 125°F (51.1°C) Needle Penetration @77°F (25°C) (ASTM D 1321): 23 dmm Color (ASTM D1500): L 0.5 Appearance (solid) : stiff, opaque
Description	Paraffin and vegetable wax blend designed for container candles
Benefits	<ul style="list-style-type: none"> • Good single pour properties under optimal conditions for containers up to 24 oz. jars • Good adhesion to jars under optimal conditions • Smooth and creamy look • Pre-blended; no additives required
General Guidelines	<ul style="list-style-type: none"> ✓ Pouring temperature should be from 175°F – 185°F. This wax will require a second pour. ✓ Fragrance oil retention of up to 8% by weight is possible. Fragrances for vegetable/paraffin blends should be used. ✓ Reference "General Guidelines for Container Candles." ✓ Once material is melted, blend should not be kept at temperatures above 160°F for extended time. Once melted, use within 48 hours.



441 DeGroate Rd., New Lenox, IL 60451
815-462-0939 Fax: 815-485-1194
www.dpswax.com
email: info@dpswax.com

DPS/MORRIS WAX
A Division of Saco Petroleum

9807 Kaw Drive, Edwardsville, KS 66111
913-948-6220 Fax: 913-948-6242
www.sacopetroleum.com



500 N. National, Springfield, MO 65804
417-869-7333 Fax: 417-831-4671
www.morriswax.com
email: ghudson@morriswax.com

6095/R9542 Velvet Blend Product Information Sheet

Product Type:

Container Candle Blend

Typical Properties:

Congealing Point (ASTM D-938): 125°F (51.7°C)
Needle Penetration @ 77°F (ASTM D-1321): 23 dmm

Description:

A smooth, creamy and very opaque blend designed for manufacturing container candles, containing both vegetable and paraffin waxes.

Features:

- Can accommodate fragrance oil up to a 6% level
- Exhibits complete pull-away from glass containers, with no rattle, when poured under the specified conditions
- Gives a nice, clean line with no dye bleed in multi-layered candles;
- Good burn characteristics when used with a wick of appropriate size and design: flame size generally 0.5 inches, clean burning, minimal blooming and hang-up;
- Available in slabs.

General Guidelines for use:

- Container choice: This is probably one of the most critical things to choose correctly for any container candle to get good results. The container shape affects the cooling rate of the wax, for optimal results the cooling rate should be as uniform as possible:
 - Containers with uniform wall thickness help to maintain a uniform cooling rate of the candles;
 - Containers with uniform wall thickness will be easier to pre-warm;
 - Containers with smooth rounded corners will work better than ones with sharp corners;
 - Containers with bottoms comparable in thickness to the walls will promote uniform cooling rate of the candles, and will be easier to heat;
 - Containers with thinner walls will pre-warm faster than ones with thicker walls or bottoms;
 - Containers with uniform volumes along its height will work better than ones that have varying volumes along its height (e.g. a straight up-and-down glass container will work better than one with a bulge in the middle);
 - Containers with smooth inside surfaces will work better than ones with uneven surfaces.
 - Generally round containers will give better results than square, oval, or angular ones.
- No need to pre-warm glass containers/jars.
- Pour Temperature: 150 – 185°F (65 – 85°C).
- Fragrances and dyes specifically developed for paraffin/vegetable waxes should be used.
- For multi-layered candles, the second pour has to be done before the first layer has pulled away, generally in less than 4 hours after the first pour.

Suggestions for optimizing production and storage conditions:

- Evaluate containers by pouring candles within the specified parameters, using the desired fragrance and dye combinations.
- Evaluate wicks for each different fragrance-dye combination. The addition of a fragrance and dye to a candle blend changes the wicking properties of the wax, often requiring adjustment of wick size to obtain optimal burning. The Atkins and Pearce HTP and Performa lines have been found to work well with this



441 DeGroate Rd., New Lenox, IL 60451
815-462-0939 Fax: 815-485-1194
www.dpswax.com
email: info@dpswax.com

DPS/MORRIS WAX
A Division of Saco Petroleum

9807 Kaw Drive, Edwardsville, KS 66111
913-948-6220 Fax: 913-948-6242
www.sacopetroleum.com



500 N. National, Springfield, MO 65804
417-869-7333 Fax: 417-831-4671
www.morriswax.com
email: ghudson@morriswax.com

blend. To optimize burning, different sizes of wicks within the lines may have to be used for each fragrance-dye combination. For more information on these Atkins and Pearce wick lines, visit www.braidway.com.

- Storage conditions: If the required equipment is available, temperature cycling can be done, as follows: Age half of the candles at room temperature and temperature cycle the other half of the candles as follows:
 - Place the candles in a fridge (we recommend 40°F/4°C) for 24 hours.
 - Remove from fridge and place in an oven or other suitable hot place (temperature preferably above 95°F/35°C, up to 104°F/40°C).
 - Repeat this cycle for at least 2 weeks, preferably 3 weeks.

The temperature cycled candles should give a good indication of how the candles will behave for each fragrance/dye combination under various storage and transport conditions.

Handling and Storage

- Vegetable waxes are more reactive than petroleum waxes, and precautions need to be taken to prevent discoloration or odor developing.
- Once the material has been melted, the blend should not be kept at temperatures higher than 160°F for extended times. It is recommended that once melted, the blend is used within 48 hours.
- Blending and holding tanks should preferably be cleaned between lots.

Troubleshooting Guide:

- Incomplete pull-away of candle from container walls:
 - Check container temperatures before pouring;
 - Check pour temperature
 - Check container design against guidelines above
 - Check candle cooling area for drafts which could result in non-uniform cooling.
- Excessive shrinkage:
 - Note that a small amount of shrinkage is normal, and that this will be more noticeable on large volume candles.
 - Check pour temperature
- Some fragrance/dye combinations work well, while others don't:
 - Although extensive testing with different fragrance/dye combinations have been done, it has obviously not been possible to test all fragrance/dye combinations. If consistent problems are seen with a particular combination, it is recommended to try a dye or fragrance from an alternative supplier.
- The candle emits smoke when it burns:
 - A candle can emit smoke if it wicks too much material for complete combustion. Undesirable burn characteristics can often be improved by changing to a smaller wick within the Atkins and Pearce lines as indicated above.
- The candle flame is too small and self-extinguishes:
 - The wick choice for the candle is not optimal. The type of wick may not be able to wick sufficient material to support a flame of a proper size. Try a wick within the Atkins and Pearce lines as indicated above. If the problem was experienced with a wick from one of the recommended lines, try a larger wick within the series.