



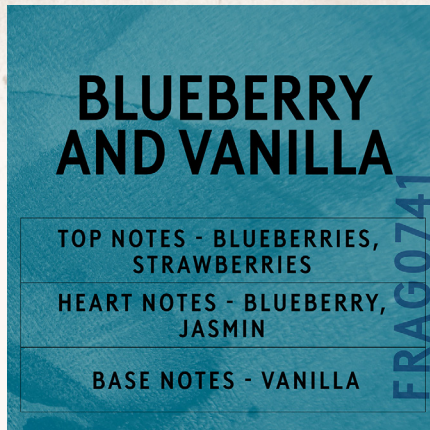
FRAG0741

RECIPE - 9CL

BLUEBERRY & VANILLA IN RS1

CANDLE SHACK

DESCRIPTION



INGREDIENTS FOR EACH CANDLE

1x 9cl glass jar
7.5g of Blueberry and Vanilla Fragrance Oil
67.5g of Candle Shack Ecosystem RS1
1x V6 Wick
1x 15mm Adhesive Wick Pad
1x WickClaw Tool for 9cl Glass

WAX

Candle Shack's EcoSystem RS1 Wax is a natural wax blend made from rapeseed and soy oils. Developed exclusively for Candle Shack, this professional-grade wax is easy to use by novice and seasoned chandler alike and is particularly popular with our luxury clients. This plant wax is also easy to wick and offers good scent throw with compatible fragrances.

VESSEL

Our Lauren 9cl Votive glass is manufactured in Italy and meets the highest standards of clarity and tolerance.

Height: 67mm

Diameter: 56mm

Internal height: 57mm

WICK

Highly engineered Wedo V candle wicks can handle complex perfumes and dyes thanks to their coreless construction. The ring-spun cotton threads with a metal powder help reduce and even eliminate carbon deposit formation or wick disintegration. All wicks are 110mm long with a thin paraffin wax coating for stability.

USAGE RECOMMENDATIONS

- We recommend heating RS1 to a maximum of 75°C (slowly to prevent damaging the wax).
- Add the fragrance at 63°C and stir for 60 seconds.
- The mixture is ready to pour at 60°C into glasses at room temperature.
- If the top is uneven once set, you can flash the surface with a heat gun or do a top-up pour to get a clean finish.
- Leave the candle to cure for at least 2 days for the best results.

DISCLAIMER

Each report shows test results for a set of candles made by Candle Shack's R&D team for that particular recipe. The test reports are not a guarantee that all candles made to the recipe will burn in exactly the same way. Variables such as ambient temperature, air flow, or the manufacturing process can affect the burning profile of a candle, so it is recommended that candle makers conduct their own testing to ensure that they are satisfied with the performance of their product.

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Technical report on a test set of candles made in Candle Shack R&D department for sooting behaviour testing and fire safety testing

Date of Report: 13/10/21

Testing Period: 29/08/2021 - 30/08/2021

Sample Ref	CS0302W-1	No. of Samples	3
Candle Name	9cl Blueberry & Vanilla Candle, 10% in RS1		
Description	75g Rapeseed Container Blend Wax Fragranced Candle		
Fragrance	Blueberry & Vanilla	Weight per candle	7.5g
Wax	Candle Shack Ecosystem RS1	Weight per candle	67.5g
Colour	White	Height	67mm
Wick Type	V6	Top Diameter (ext)	56mm
Wick Positioning	Centred	Top Diameter (int)	51mm
Surface Defects	None	Base Diameter	50mm

TECHNICAL REPORT

Part 1: SPECIFICATION FOR SOOTING BEHAVIOUR

To evaluate the performance of a test set of candles in a controlled environment against the requirements of **BS EN 15426:2018** (Candles. Specification for sooting behaviour)

Part 2: SPECIFICATION FOR FIRE SAFETY

To evaluate the performance of a test set of candles in a controlled environment against the requirements of **BS EN 15493:2019** (Candles. Specification for fire safety)

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Part 1: SPECIFICATION FOR SOOTING BEHAVIOUR

Requirement

When tested in accordance with clause 9 of EN 15426:2018, the average soot index per hour from three tests (samples) shall be less than 1.0/h

The room temperature during testing was $20 \pm 5^\circ\text{C}$

Wicks were trimmed to 5mm before lighting.

Cycles: 2 x 240 ± 5 min cycles with >60min pause between cycles)

Soot testing was performed in wire mesh cylinder Type 1 (Diameter: 230 ± 10 mm)

Sample Ref.	Total burn time t_m (h)	Hourly soot index S_{i_h}	Average soot index per hour S_{i_h}	Result
CS0302W-1.1	7.17	0.16	0.13	PASS
CS0302W-1.2	7.17	0.16		
CS0302W-1.3	7.17	0.06		

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Part 2: SPECIFICATION FOR FIRE SAFETY

Test Property	Test Method	Requirements	Result
Stability	EN 15493:2019 4.1 (Visual Check)	Candle should not tip over when placed on a 10° incline plane	PASS
Secondary Ignition	EN 15493:2019 4.2 (Visual Check)	No secondary ignition shall occur for more than 10 s	PASS
Flame Height	EN 15493:2019 4.3 (Measurement)	The flame height for all candle types, except for tea lights, shall not exceed 75mm. The flame height for tea lights shall not exceed 30mm	PASS Maximum: 15 mm
Behaviour after extinguishing	EN 15493:2019 4.5.1 (Visual Check)	After extinguishing the candle shall not spontaneously re-light	PASS
	EN 15493:2019 4.5.2 (Measurement)	The wick shall not continue to glow or smoke for an average time of more than 30 s after extinguishing	PASS Average: 5 s
Container Candles	EN 15493:2019 4.6 (Visual Check)	The container shall not crack or break at any time throughout the burning test	PASS

The room temperature during testing was 20±5°C
 Wicks were trimmed to 5mm before lighting.

Candle Performance (240 ± 5 min cycles with >60min pause between cycles)

Sample Ref.	Gross Weight (g)	Total Wax Consumed (g)	*Total Burning Time (h)	Wax Consumption Rate (g/h)
CS0302W-1.1	198.8	66.4	27.4	2.42
CS0302W-1.2	198.8	70.2	31.9	2.20
CS0302W-1.3	198	69.9	27.4	2.55

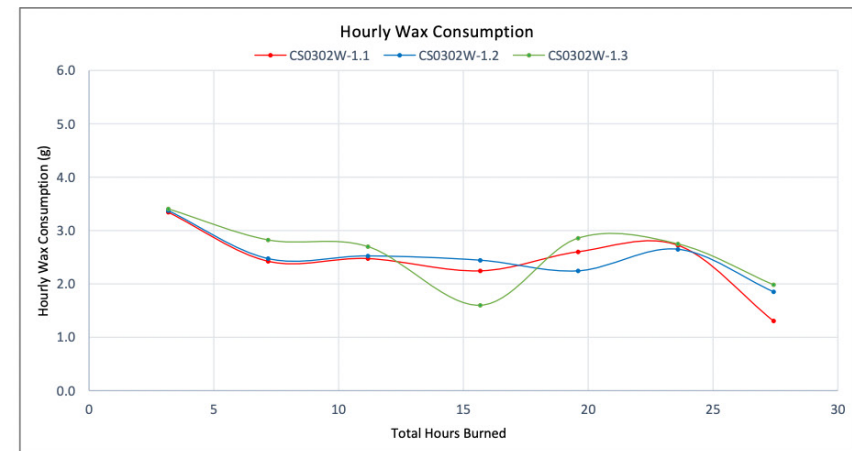
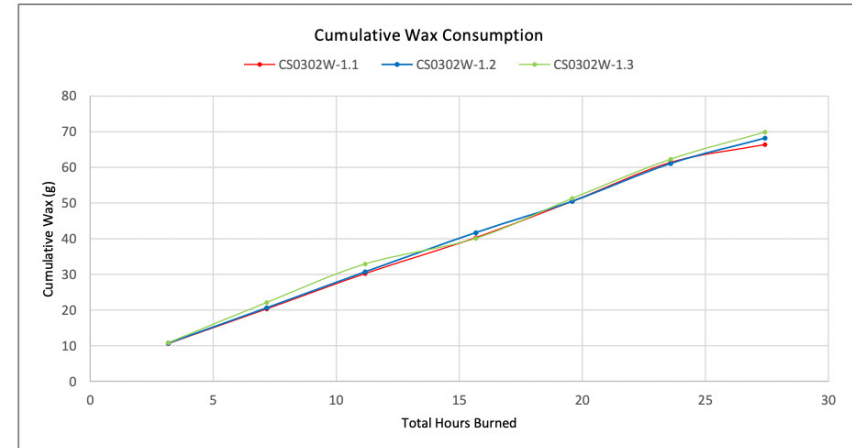
*If a candle self-extinguishes during the final burn cycle, the time of self-extinguishing is estimated

Notes and Discussion:

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CHARTS



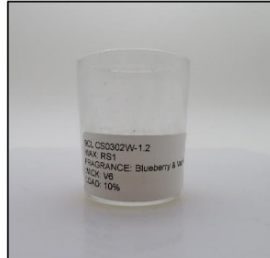
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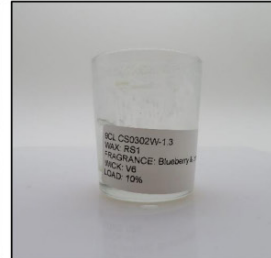
IMAGE GALLERY



End of Burn Front- Sample 1



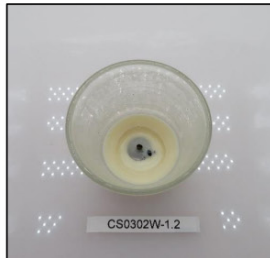
End of Burn Front- Sample 2



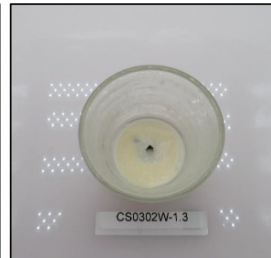
End of Burn Front- Sample 3



End of Burn Top - Sample 1



End of Burn Top - Sample 2



End of Burn Top - Sample 3

END OF REPORT

David Barn
Head of R&D