



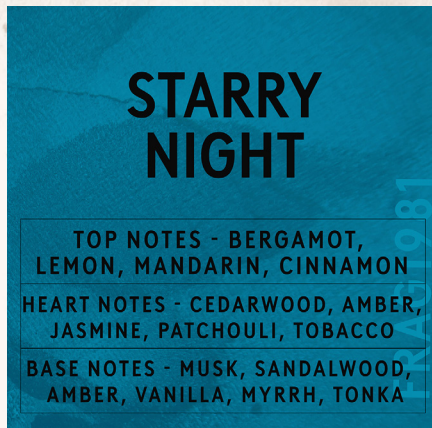
FRAG1981

RECIPE - 30CL

STARRY NIGHT IN CS1

CANDLE SHACK

DESCRIPTION



INGREDIENTS FOR EACH CANDLE

15.4g Starry Night Fragrance Oil
204.6g Candle Shack CS1 Container Wax
1 x PGS5 Wick
1 x 15mm Adhesive Wick Pad
1 x 30cl Christmas glass jar

WAX

Candle Shack CS1 Container Wax is optimised almost entirely for scent throw and now requested by many of our luxury brand clients. CS1 is a mineral and rapeseed blend, with a beautiful white texture and unmatched stability. It is also cruelty free, paraben free and vegan friendly.

VESSEL

Our Lotti 30cl glass is manufactured in Italy and meets the highest standards of clarity and tolerance.

Height: 90mm

Diameter: 78mm

Internal height: 75mm

WICK

All our PGS5 wicks are 110mm long with a thin paraffin wax coating for stability.

USAGE RECOMMENDATIONS:

- We recommend heating CS1 to 75°C to melt.
- Add fragrance at 70°C and stir for 60 seconds.
- The mixture is ready to pour at 65°C into warmed glasses.
- 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 2+ days for 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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Candleshack Ltd, Unit A, West Carron Works,
Stenhouse Road, Carron, Stirlingshire, FK2 8DR

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: 06/10/22

Testing Period: 27/09/2022 - 06/10/2022

Sample Ref	RCP0059D-2	No. of Samples	3
Candle Name	30cl Starry Night Candle, 7% in CS1		
Description	220g Rapeseed & Coconut Wax Fragranced Candle		
Fragrance	Starry Night	Weight per candle	15.4g
Wax	Candle Shack Blended Mineral Wax CS1	Weight per candle	204.6g
Colour	White	Height	92mm
Wick Type	Stabilo14	Top Diameter (ext)	82mm
Wick Positioning	Centred	Top Diameter (int)	76mm
Surface Defects	None	Base Diameter	76mm

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±5°C

Wicks were trimmed to 5mm before lighting.

Cycles: 3 x 240 ± 5 min cycles with >60min pause between cycles)

Soot testing was performed in wire mesh cylinder Type 2 (Diameter: 300 ± 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
RCP0059D-2.1	12.00	0.18	0.12	PASS
RCP0059D-2.2	12.00	0.06		
RCP0059D-2.3	12.00	0.12		



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Part 2: SPECIFICATION FOR FIRE SAFETY

Test Property	Test Method	Test 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: 35 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: 6 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)
RCP0059D-2.1	545.7	213.1	48.0	4.44
RCP0059D-2.2	539.9	204.2	52.0	3.93
RCP0059D-2.3	535.2	200.4	52.0	3.85

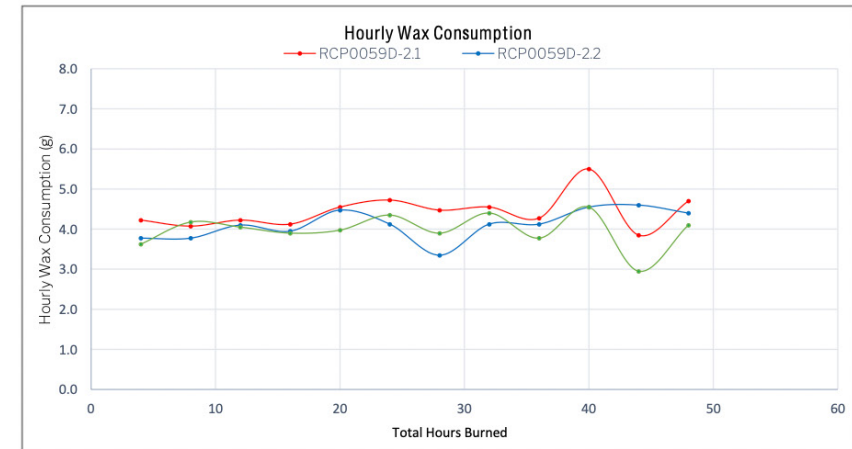
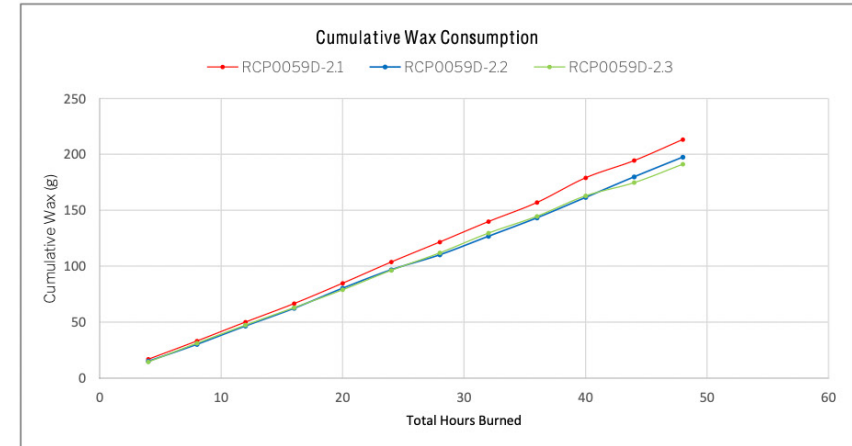
*If a candle self-extinguishes during the final burn cycle, the time of self-extinguishing is estimated.

Notes and Discussion:



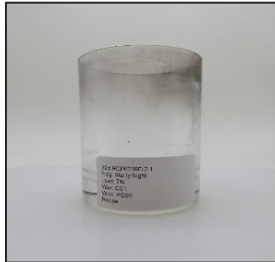
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CHARTS



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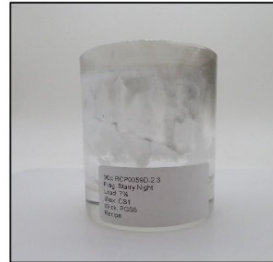
IMAGE GALLERY



End of Burn Front - Sample 1



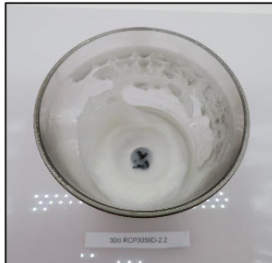
End of Burn Front - Sample 2



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

