

RECIPE - 30CL
VELVET PEONY & OUD IN CS1

## CANDLE

#### DESCRIPTION



#### INGREDIENTS FOR EACH CANDLE

1x 30cl glass jar

15.4g of Velvet Peony and Oud Fragrance Oil

204.6g of Candle Shack Container Wax CS1

1x LX14 Wick

1x 15mm Adhesive Wick Pad

1x WickClaw Tool for 30cl Glass

#### WAX

Candle Shack's CS1 Container Wax is blended from mineral and rapeseed oil. It is optimised for scent throw and maintains excellent hot and cold throw while using less fragrance. This vegan-friendly container wax also has a beautiful white texture and unmatched stability, making it popular with our luxury clients.

#### **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**

The Wedo LX candle wick series is one of Wedo's simplest and most popular wicks. Suitable for paraffin container candles, votives and pillar candles, the LX wicks are made of cotton and are without cores. All wicks are 110mm long with a thin paraffin wax coating for stability.

#### **USAGE RECOMMENDATIONS**

- We recommend heating CS1 to 75°C to melt.
- Add the fragrance at 70°C and stir for 60 seconds.
- Warm your glasses by putting them in a 40°C oven for 5 to 10 minutes.
- 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 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.



Candle Shack Ltd Unit A, West Carron Works Stenhouse Rd 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: 17/01/22 Testing Period: 01/10/2021 - 15/10/2021

Sample Ref	CS0299D-1	No. of Samples	3	
Candle Name	30cl Velvet Peony & Oud Candle, 7% in CS1			
Description	220g Paraffin Wax Fragranced Candle			
Fragrance	Velvet Peony & Oud	Weight per candle	15.4g	
Wax	Candle Shack Container Wax CS1		Weight per candle	204.6g
Colour	White	Height	92mm	
Wick Type	LX14	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 Si <sub>h</sub>	Average soot index per hour Si <sub>h</sub>	Result
CS0299D-1	12.08	0.02		
CS0299D-2	12.08	0.00	0.02	PASS
CS0299D-3	12.08	0.06		A1 100-00-00 CO



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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)	(Measurement) 75mm. The flame height for tea lights	
	,	shall not exceed 30mm	Maximum: 25 mm
	EN 15493:2019 4.5.1 (Visual Check)	After extinguishing the candle shall not spontaneously re-light	PASS
Behaviour after extinguishing	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: 7 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)
CS0299D-1	547.4	211.0	60.5	3.49
CS0299D-2	550.5	199.7	60.5	3.30
CS0299D-3	550.3	204.1	60.5	3.37

<sup>\*</sup>If a candle self-extinguishes during the final burn cycle, the time of self-extinguishing is estimated.

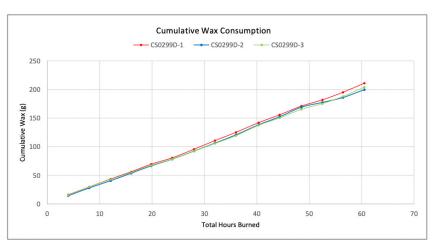
# Notes and Discussion:

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#### **CHARTS**





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### CANDLE SHACK

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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**

DRJam

David Barn Head of R&D