

RECIPE - 30CL
SOLARIS NOIR IN 464 (NOW MADE IN EUROPE)

CANDLE

DESCRIPTION



INGREDIENTS FOR EACH CANDLE

1x 30cl Glass Jar

22g of Solaris Noir Fragrance Oil

198g of Golden Wax 464 (Now Made In Europe)

1x TCR27/16 Wick

1x 15mm Adhesive Wick Pad

1x Three Jar Wick Centering Tool

WAX

Made by global wax giant AAK in Sweden, Golden Wax 464 is an excellent soy container wax. It offers a powerful hot and cold scent throw, fantastic glass adhesion, smooth resets and is produced under rigorous ethical and environmental standards.

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

RAL-accrediated TCR wicks are meticulously crafted by Monterosa from unbleached cotton, intricately interwoven with a delicate paper thread and encased in a protective outer jacket. To ensure optimal performance, the wicks are then expertly waxed and crimped by Candle Shack in Scotland.

USAGE RECOMMENDATIONS

- We recommend working at an ambient temperature of 18 to 25°C.
- We recommend heating 464 to 70°C to melt.
- Add the fragrance at 65-70°C and stir until homogeneous.
- The mixture is ready to pour at 60-70°C into jars at room temperature.
- If the top is uneven once set, you can flash the sur face with a heat gun.
- Leave the candle to cure for at least 2 days at 18 to 25°C for consistent 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.



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: 23/01/24 Testing Period: 05/01/2024 - 23/01/2024

Sample Ref	RCP0170E-2	No. of Samples	3	
Candle Name	30cl Solaris Noir Candle, 10% in EU464			
Description	220g Soy Wax Fragranced Candle			
Fragrance	Solaris Noir Fragrance Oil	Weight per candle	22g	
Wax	GoldenWax 464 (now made in Europe)		Weight per candle	198g
Colour	Off White	Height	92mm	
Wick Type	TCR27/16	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)



CANDLE SHACK

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 $t_{\rm m}$ (h)	Hourly soot index Si _h	Average soot index per hour Si _h	Result
RCP0170E-2.1	12.00	0.11		
RCP0170E-2.2	12.00	0.30	0.32	PASS
RCP0170E-2.3	12.00	0.56		



CANDLE SHACK

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		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	PASS
		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	PASS
	(30 s after extinguishing	Average: 12 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)
RCP0170E-2.1	540.7	186.0	40.0	4.65
RCP0170E-2.2	538.6	191.5	44.0	4.35
RCP0170E-2.3	548.9	207.8	48.0	4.33

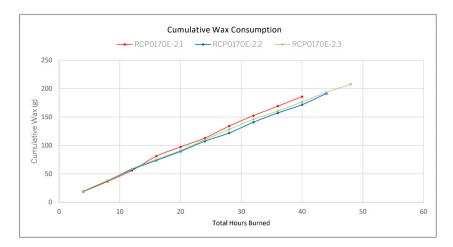
^{*}If a candle self-extinguishes during the final burn cycle, the time of self-extinguishing is estimated.

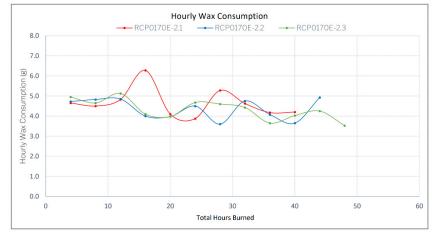
Notes and Discussion:



CANDLE SHACK

CHARTS







CANDLE SHACK

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



Patrycja Krajewska Development Technologist

