



FRAG4611

RECIPE - 9CL

SAHARA IN 464 (NOW MADE IN EUROPE)

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DESCRIPTION



INGREDIENTS FOR EACH CANDLE

| |
|--|
| 1x 9cl Candle Jar |
| 7.5g of Sahara Fragrance Oil |
| 67.5g of Golden Wax 464 (Now made in Europe) |
| 1x TCR 18/10 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 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

RAL-accredited 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 surface 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.

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Candle Shack Ltd, Unit A, West Carron Works,
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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: 23/04/24

Testing Period: 03/04/2024 - 21/04/2024

| | | | |
|------------------|------------------------------------|--------------------|-------|
| Sample Ref | RCP0171C-2 | No. of Samples | 3 |
| Candle Name | 9cl Sahara Candle, 10% in EU464 | | |
| Description | 75g Soy Wax Fragranced Candle | | |
| Fragrance | Sahara | Weight per candle | 7.5g |
| Wax | GoldenWax 464 (now made in Europe) | Weight per candle | 67.5g |
| Colour | Off-White | Height | 67mm |
| Wick Type | TCR18/10 | 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±5°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 Si_h | Average soot index per hour Si_h | Result |
|--------------|------------------------------|-----------------------------|---------------------------------------|--------|
| RCP0171C-2.1 | 8.00 | 0.00 | 0.03 | PASS |
| RCP0171C-2.2 | 8.00 | 0.07 | | |
| RCP0171C-2.3 | 8.00 | 0.03 | | |



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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: 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: 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) |
|--------------|------------------|------------------------|-------------------------|----------------------------|
| RCP0171C-2.1 | 195.8 | 64.6 | 28.0 | 2.31 |
| RCP0171C-2.2 | 195.1 | 64.4 | 28.0 | 2.30 |
| RCP0171C-2.3 | 196.6 | 59.2 | 28.0 | 2.11 |

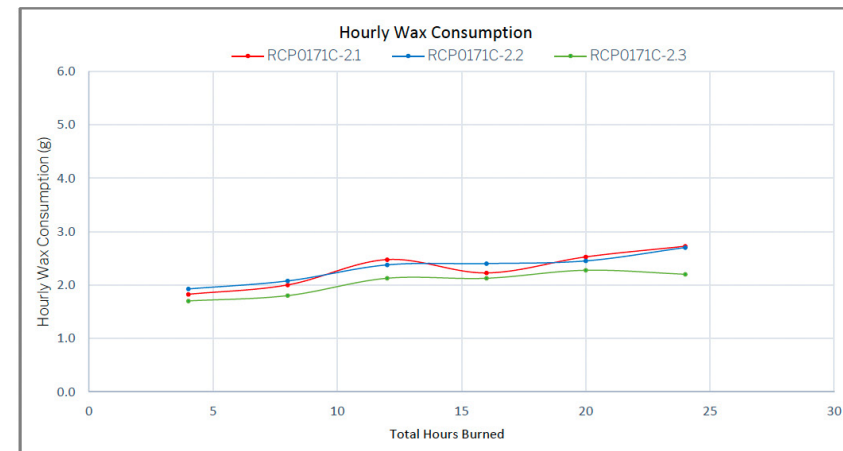
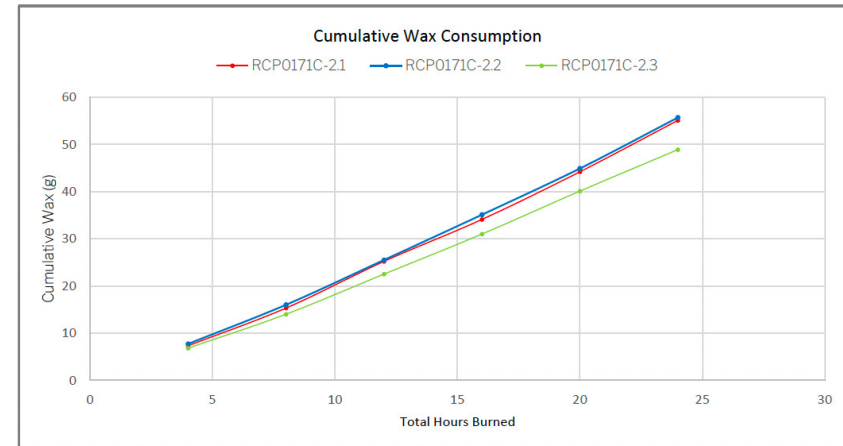
*If a candle self-extinguishes during the final burn cycle, the time of self-extinguishing is estimated.

Notes and Discussion:



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CHARTS

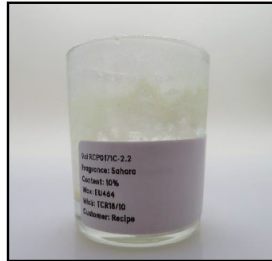


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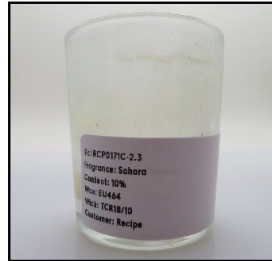
IMAGE GALLERY



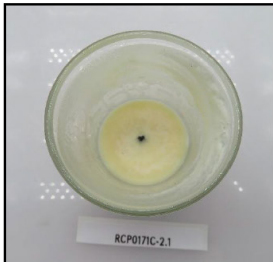
End of Burn Front - Sample 1



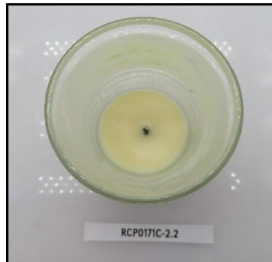
End of Burn Front - Sample 2



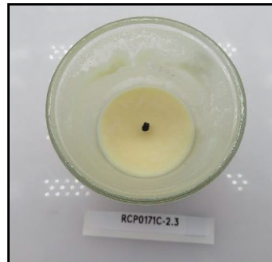
End of Burn Front - Sample 3



End of Burn Top - Sample 1



End of Burn Top - Sample 2



End of Burn Top - Sample 3

END OF REPORT

Patrycja Krajewska

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