



# TEST REPORT

**Reference No.** ..... : WTF21F08089321X1C  
**Applicant** ..... : Mid Ocean Brands B.V.  
**Address** ..... : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong  
**Manufacturer** ..... : 114036  
**Sample Name** ..... : Candle  
**Model No.** ..... : MO6320  
**Test Method** ..... : Please refer to next page (s)  
**Test Conclusion** ..... : Please refer to next page (s)  
**Date of Receipt sample** ..... : 2021-08-09  
**Date of Test** ..... : 2021-08-09 to 2021-09-02  
**Date of Issue** ..... : 2021-09-16  
**Test Result** ..... : Please refer to next page (s)  
**Note** ..... : This report is based on Waltek test report WTF21F08089321C for revising, and replaced report WTF21F08089321C.

## Remarks:

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**Test requested and conclusion(s):**

No.	Standard and requirement	Conclusion(s)
1	BS EN 15426:2018 Candles-specification for sooting behavior	PASS
2	BS EN 15494:2019 Candles. Product safety labels	PASS
3	BS EN 15493:2019 Candles. Specification for fire safety	PASS

**Test result(s):**

Soot release (BS EN 15426:2018)

Test standard:	BS EN 15426:2018 Candles-specification for sooting behavior
Number of sample(s) tested:	3 pieces
Initial observation:	No visible defects was found on all tested samples
Test requirement:	The average soot index from three tests (samples) shall be less than 1.0/hour.



Tested sample	A1	A2	A3
Original candle diameter (mm)	Ø21.02	Ø21.44	Ø21.41
Original candle height (mm)	291.54	289.14	290.07
Net candle weight(g)	77.0	76.4	76.8
Total measuring time, $t_m$ (hours)	8	8	8
Soot index, $S_i$	0.55	0.32	0.37
Average soot index per hour, $S_{ih}(=S_i/t_m)$	0.07	0.04	0.05
Average soot index from 3 samples	0.05		
Note: acceptance criteria: <1.0/hour			

# WALTEK



**Test result(s): Candle Fire safety labelling (BS EN 15494:2019)**

Test standard:	BS EN 15494:2019 Candles-Product Safety Labels
Number of sample(s) tested:	One set product with full packaging

Clause	Requirement	Result	Rating
4.2	<p><b>Layout of the product safety label</b></p> <p>The product safety label for candles consists of the following components:                      general warning sign based upon ISO 7010- W001 (see Figure 1) .                      mandatory supplementary safety information symbols or texts (see Tables 1 to 3).                      optional supplementary safety information symbols or texts (See Annex A) .                      The supplementary safety information symbols or texts shall be placed in close proximity to the general warning sign below and/or to the right beside the general warning sign (see Figure 2) . Borders are optional.                      All components of the product safety label shall be in distinct contrast from its background. For candle labels made with one-colour printing, the background colour of the general warning sign does not need to be yellow.</p>  <p>Figure 1 – General warning sign</p>  <p>Figure 2 – examples of layouts of a product safety label for candles</p>	<p>See Test Data</p> <p>Safety information beside the general warning sign</p>	PASS
4.3	<p><b>Layout of supplementary safety information</b></p> <p>If safety information texts are chosen rather than safety information symbols then they or their practical equivalents shall be given in their own national language or languages of the country in which the candles are marketed.</p> <p>The supplementary safety symbols and text shall be reproduced as shown in Tables 1 to 3 and Tables A. 1 to A. 5. However, some degree of modification is permitted when cultural differences or special application formats (e.g. candle shape/type) need to be considered, provided the original meaning is retained and comprehension of the</p>	<p>The height of the safety1 symbols:5.44mm</p>	PASS



	<p>safety information is maintained.</p> <p>The minimum height of the safety symbols is 5 mm provided that the content of the safety message is legible due to the quality of the print.</p>		
4.4	<p>Display of a product safety label</p> <p>As a minimum the product safety label with the mandatory supplementary safety information (Tables 1 to 3) shall be visible and legible on the packaging or product.</p> <p>If the space is limited, the optional supplementary safety information can be placed elsewhere, e.g. on the backside of a peel-off label or the inner sides of a fold-out label, together with the mandatory supplementary safety information repeated. There shall be clear indication where to find this additional safety information.</p>	Safety labels on packaging	PASS

Test data:





In the form of symbol	In the form of Text	Finding
Table 1- mandatory supplementary safety information		
	Never leave a burning candle unattended.	In Symbol Present
	Keep away from things that can catch fire.	In Symbol Present
	Keep away from children and pets.	In Symbol Present
Table 2 – additional mandatory supplementary safety information –specific for certain candles types		
	Use a heat resistant candleholder.	In Symbol Present



Table 3 –additional mandatory supplementary safety information –specific for floating candles

	<p>Use in a suitable bowl filled with water</p>	<p>No Present</p>
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Table A.1 – optional supplementary safety information

	<p>Keep candles at least x cm apart. Note: X represents the minimum safety distance between candles and is defined by the manufacturer.</p>	<p>In Symbol Present</p>
	<p>Do not burn in a draught.</p>	<p>No Present</p>
	<p>Do not place near a heat source.</p>	<p>No Present</p>
	<p>Place candle upright.</p>	<p>No Present</p>
	<p>Trim wick to x cm, Note: x represents the maximum length of the wick and is defined by the manufacturer.</p>	<p>Text From Present</p>
	<p>Snuff out the flame. Do not blow it out.</p>	<p>Text From Present</p>




	<p>Keep wax pool clear of matches and debris.</p>	<p>Text From Present</p>
	<p>Do not move a burning candle.</p>	<p>Text From Present</p>
	<p>Never use liquid to extinguish.</p>	<p>Not Present</p>
	<p>Remove packaging before use.</p>	<p>Text Form Present</p>
	<p>Trim edge if higher than x cm. Note: x represents the maximum length of the wick and is defined by the manufacturer.</p>	<p>Not Present</p>
<p>Table A.2 – additional optional supplementary safety information – specific for tea light</p>		
	<p>Only use in holders and warning stoves with sufficient ventilation.</p>	<p>Not Present</p>
<p>Table A.3 – additional optional supplementary safety information – specific for votive candles</p>		
	<p>This candle liquefies, use a suitable container.</p>	<p>Not Present</p>



Table A.4 – additional optional supplementary safety information – specific for container candles

	Do not touch, may be hot.	Not Present
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Table A.5 – Additional optional supplementary safety information – specific for candles not appropriate to use in a warming unit, e.g. scented tea lights

	Do not burn in a warming unit.	Not Present
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Note: This sample is received on August 30, 2021

# WALTEK

**Test result(s): Burning safety (BS EN 15493:2019)**

Test standard:	BS EN 15493:2019 Candles. Specification for fire safety
Number of sample(s) tested:	3 pieces of candle for testing
Instruction label	Provided
Burn test cycle	Burn candle 4 hours, pause for minimum 1 hour Continue to burn in cycles until a residual height of 20mm

Clause	Requirement	Result
4.1	Stability – Freestanding candles, container candles and candles that are sold together with a holder or other accessories shall not tip over when tested on a slope of $(10 \pm 0.2)^\circ$ .	PASS
4.2	Secondary ignition No secondary ignition shall occur for more than 10s	PASS
4.3	Flame height Maximum 75 mm for all candles except tea lights Maximum 30 mm for tea lights	PASS
4.4	Self-extinguishing To prevent the ignition of the surface underneath, freestanding candles marketed as self-extinguishing shall self-extinguish at the end of the burning time. The candles shall neither burn a paper placed underneath nor cause any scorch marks on it during the whole burning test.  To prevent the ignition or cracking of a supporting holder, non- freestanding candles marketed as self-extinguishing shall self- extinguish at a residual height of $\geq 12$ mm in case of candles with a diameter of $\leq 14$ mm and at a residual height of $\geq 18$ mm in case of other candles.	NA
4.5	Behaviour after extinguishing After extinguishing the candle shall not spontaneously re-light. The wick shall not continue to glow or smoke for an average time of more than 30 s after extinguishing.	PASS
4.6	Container candles The container shall not crack or break at any time throughout the burning test.	NA

Abbreviation: NA =Not applicable

## Test data:

Sample ID	Wax weight (in net and g)	Size (mm)
A1	76.4	$\Phi 76.67 \times 290.50$
A2	77.3	$\Phi 76.49 \times 291.80$
A3	76.3	$\Phi 75.67 \times 290.41$

Sample ID	Flame height (mm)		Total burn time(hours)	Percentage of wax burnt (%)	Wax spillage(%)	Average after smoke or glow time (s)
	Maximum	Maximum				
A1	20	35	4.2	23.0	66.5	7
A2	20	35	8.6	70.8	20.4	6
A3	20	35	4.0	23.5	65.0	7



**Test Specimen Description:**

No.1: White candle(MO 6320)

**Sample photo:**



===== End of Report =====