



TEST REPORT

Report No. : WTF22F05097236C
Applicant : Mid Ocean Brands B.V.
Address : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan,
Kowloon, Hong Kong
Manufacturer : 112213
Sample Name : Glass candle holder, Set of 2 glass candle holder
Sample Model : CX1508, CX1509
Test Requested : 1) Determination of Lead content in the submitted sample in accordance with REACH regulation Annex XVII Entries 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628
2) Determination of Cadmium content in the submitted sample in accordance with REACH regulation Annex XVII Entries 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No.494/2011, No.835/2012 and (EU)2016/217
3) Determination of specified Phthalates content according to Annex XVII Items 51 & 52 of the REACH Regulation (EC) No.1907/2006 & Amendment No.552/2009 & No. 2018/2005
4) As specified by client, determination of the free and hydrolysed formaldehyde content in submitted sample
5) As specified by client, to determine the Pentachlorophenol and its salts and esters (PCP) content in the submitted sample with reference to Regulation (EU)2019/1021 and its amendment(EU)2020/784&(EU)2020/1203&(EU)2020/1204& (EU)2021/115&(EU)2021/277.
6) BS EN 15426:2018 Candles-specification for sooting behavior
7) BS EN 15494:2019 Candles. Product safety labels
8) BS EN 15493:2019 Candles. Specification for fire safety
Test Conclusion : Refer to next page (s)
Date of Receipt sample : 2022-05-17
Testing period : 2022-05-17 to 2022-05-25
Date of Issue : 2022-05-27
Test Result : Refer to next page (s)
Note : As specified by client, only test the designated sample.

Prepared By:

Waltek Testing Group (Foshan) Co., Ltd.

Address: No.13-19, 2/F., 2nd Building, Sunlink International Machinery City,
Chencun, Shunde District, Foshan, Guangdong, China

Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Signed for and on behalf of
Waltek Testing Group (Foshan) Co., Ltd.

Swing.Liang

Waltek Testing Group (Foshan) Co., Ltd.

<http://www.waltek.com.cn>



Report No.: WTF22F05097236C

Sample photo:



WALTEK



Report No.: WTF22F05097236C

Test Results:

1) Lead (Pb)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

Test Item	LOQ (mg/kg)	Results (mg/kg)				Limit (mg/kg)
		No.1	No.2	No.3	No.4	
Lead(Pb)	2	ND	ND	ND	ND	500
Conclusion	--	Pass	Pass	Pass	Pass	--

Test Item	LOQ (mg/kg)	Results (mg/kg)		Limit (mg/kg)
		No.5+No.6+No.8	No.7	
Lead(Pb)	2	21*	ND	500
Conclusion	--	Pass	Pass	--

Test Item	LOQ (mg/kg)	Results (mg/kg)		Limit (mg/kg)
		No.9	No.10	
Lead(Pb)	2	ND	ND	500
Conclusion	--	Pass	Pass	--

Note:

- (1) mg/kg = milligram per kilogram
- (2) ND = Not Detected (lower than LOQ)
- (3) LOQ = Limit of quantitation
- (4) Limit of Lead was quoted from REACH regulation Annex XVII Item 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628.
- (5) "*" = Results are calculated by the minimum weight of mixed components.



Report No.: WTF22F05097236C

2) Cadmium (Cd)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

Test Item	LOQ (mg/kg)	Results (mg/kg)		
		No.2	No.3	No.4
Cadmium(Cd)	2	ND	ND	ND
Conclusion	--	Pass	Pass	Pass

Test Item	LOQ (mg/kg)	Results (mg/kg)			
		No.5+No.6+No.8	No.7	No.9	No.10
Cadmium(Cd)	2	ND*	ND	ND	ND
Conclusion	--	Pass	Pass	Pass	Pass

Note:

- (1) mg/kg = milligram per kilogram
- (2) ND = Not Detected (lower than LOQ)
- (3) LOQ = Limit of quantitation
- (4) Limit of Cadmium according to REACH regulation Annex XVII Item 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No. 494/2011 and No. 835/2012 and (EU) 2016/217.

Category	Limit (mg/kg)
Wet paint	100
Surface coating	1000
Plastic	100
Metal parts of jewellery and hair accessories	100

- (5) “**” = Results are calculated by the minimum weight of mixed components.



Report No.: WTF22F05097236C

3) Phthalates

Test Method: With reference to EN14372:2004, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Test Items	LOQ (%)	Results (%)		Limit (%)
		No.2	No.3	
Benzyl butyl phthalate (BBP)	0.005	ND	ND	sum of four phthalates < 0.1
Di (2-ethyl hexyl)- phthalate (DEHP)	0.005	ND	ND	
Dibutyl phthalate (DBP)	0.005	ND	ND	
Diisobutyl phthalate (DIBP)	0.005	ND	ND	
Diisodecyl phthalate (DIDP)	0.01	ND	ND	sum of three phthalates < 0.1
Diisononyl phthalate (DINP)	0.01	ND	ND	
Di-n-octyl phthalate (DNOP)	0.005	ND	ND	
Conclusion	--	Pass	Pass	--

Test Items	LOQ (%)	Results (%)	Limit (%)
		No.5+No.6+No.8	
Benzyl butyl phthalate (BBP)	0.005	ND*	sum of four phthalates < 0.1
Di (2-ethyl hexyl)- phthalate (DEHP)	0.005	ND*	
Dibutyl phthalate (DBP)	0.005	ND*	
Diisobutyl phthalate (DIBP)	0.005	ND*	
Diisodecyl phthalate (DIDP)	0.01	ND*	sum of three phthalates < 0.1
Diisononyl phthalate (DINP)	0.01	ND*	
Di-n-octyl phthalate (DNOP)	0.005	ND*	
Conclusion	--	Pass	--



Report No.: WTF22F05097236C

Test Items	LOQ (%)	Results (%)		Limit (%)
		No.7	No.10	
Benzyl butyl phthalate (BBP)	0.005	ND	ND	sum of four phthalates < 0.1
Di (2-ethyl hexyl)- phthalate (DEHP)	0.005	ND	ND	
Dibutyl phthalate (DBP)	0.005	ND	ND	
Diisobutyl phthalate (DIBP)	0.005	ND	ND	
Diisodecyl phthalate (DIDP)	0.01	ND	ND	sum of three phthalates < 0.1
Diisononyl phthalate (DINP)	0.01	ND	ND	
Di-n-octyl phthalate (DNOP)	0.005	ND	ND	
Conclusion	--	Pass	Pass	--

Note:

DBP= Dibutyl phthalate

BBP= Benzyl butyl phthalate

DEHP= Bis-(2-ethylhexyl)- phthalate

DINP= Di-isononyl phthalate

DNOP= Di-n-octyl phthalate

DIDP= Di-isodecyl phthalate

DIBP= Diisobutyl phthalate

(1) % = percentage by weight

(2) ND = Not Detected or lower than limit of quantitation

(3) LOQ = Limit of quantitation

(4) "<" = less than

(5) The above limit was quoted according to Annex XVII Items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 & No. 2018/2005 (formerly known as Directive 2005/84/EC) for phthalate content in toys and child care articles.

(6) "*" = Results are calculated by the minimum weight of mixed components.



Report No.: WTF22F05097236C

4) Formaldehyde

Test Method: With reference to EN717-3:1996, analysis was performed by UV-VIS

Test Item	Unit	Result	LOQ	Client's Limit
		No.7		
Formaldehyde (CH ₂ O)	mg/kg	ND	10	80
Conclusion	--	Pass	--	--

Note:

- ND = Not Detected or lower than limit of quantitation
- mg/kg =milligram per kilogram=ppm
- LOQ = Limit of quantitation

WALTEK



Report No.: WTF22F05097236C

5) Pentachlorophenol(PCP)

Test Method: With reference to ISO 17070: 2015, analysis was performed by GC-MS

Substance Names	Result (mg/kg)	Limit (mg/kg)	LOQ (mg/kg)
	No.7		
Pentachlorophenol and its salts and esters (PCP)	ND	≤ 5mg/kg in substances, mixtures or articles	5
Conclusion	Pass	--	--

Description for Specimen:

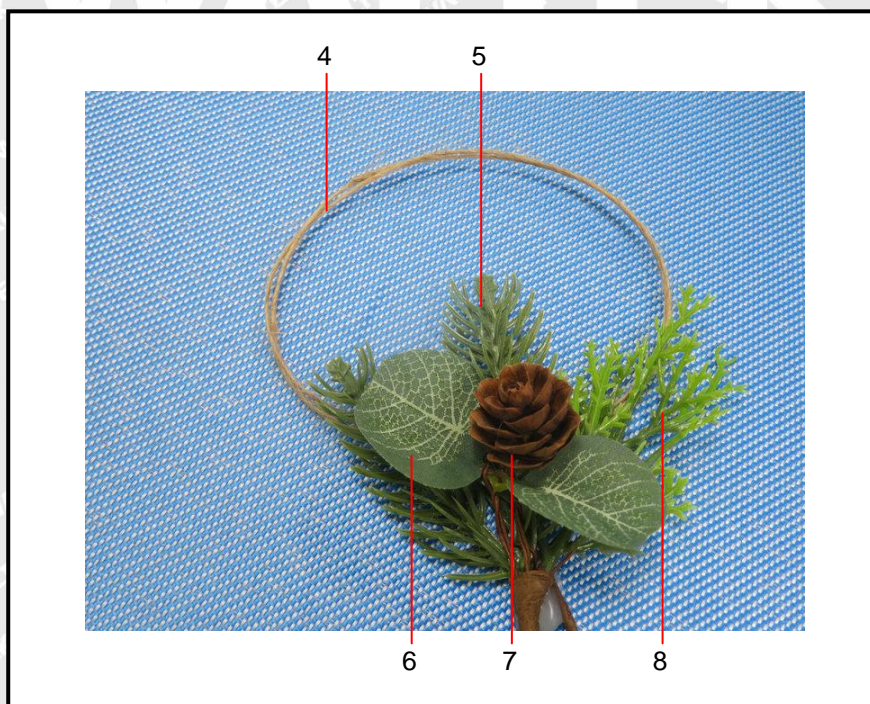
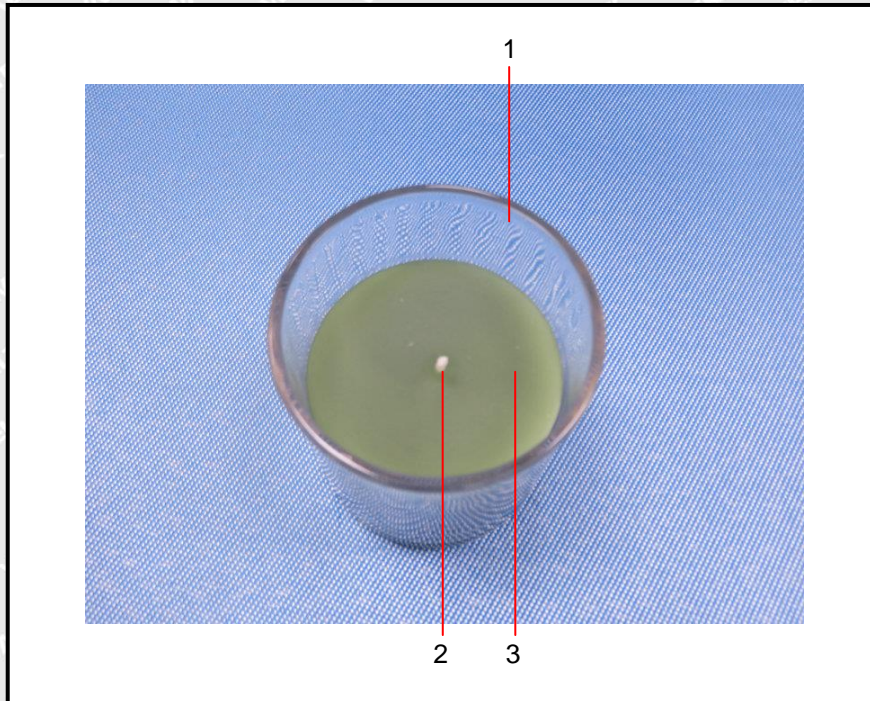
- No.1: Transparent glass cup
- No.2: White candle wick
- No.3: Green candle
- No.4: Brown grass rope
- No.5: Green plastic leaf
- No.6: Green plastic leaf
- No.7: Brown wood cone
- No.8: Light green plastic leaf
- No.9: Brown paper sheet
- No.10: Transparent glue

WALTEK



Report No.: WTF22F05097236C

Photograph of parts tested:





Report No.: WTF22F05097236C



9 10

WALTEK



Report No.: WTF22F05097236C

6) Soot release (BS EN 15426:2018)



Test standard:	BS EN 15426:2018 Candles-specification for sooting behavior
Number of sample(s) tested:	3 pieces of container candle
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.
Test Conclusion:	Pass

Tested sample	A1	A2	A3
Original candle diameter (mm)	Ø65.23	Ø65.14	Ø65.30
Original candle height (mm)	79.69	79.67	79.51
Net candle weight(g)	118.8	116.3	118.3
Total measuring time, t_m (hours)	8	8	8
Soot index, S_i	0.51	0.61	0.62
Average soot index per hour, $S_{ih}(=S_i/t_m)$	0.06	0.08	0.08
Average soot inde from 3 samples Note: acceptance criteria: <1.0/hour	0.07		

Tested sample	B1	B2	B3
Original candle diameter (mm)	Ø50.23	Ø50.41	Ø50.29
Original candle height (mm)	67.03	68.93	67.05
Net candle weight(g)	55.7	54.6	56.5
Total measuring time, t_m (hours)	8	8	8
Soot index, S_i	0.45	0.54	0.48
Average soot index per hour, $S_{ih}(=S_i/t_m)$	0.06	0.07	0.06
Average soot inde from 3 samples Note: acceptance criteria: <1.0/hour	0.07		

7) 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
Test Conclusion:	Pass

Clause	Requirement	Result	Rating
		1&2	
4.2	<p>Layout of the product safety label</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>Layout of supplementary safety information</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 height of the safety symbols:6.0mm</p>	PASS



Report No.: WTF22F05097236C





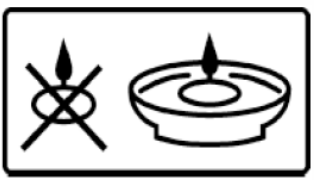
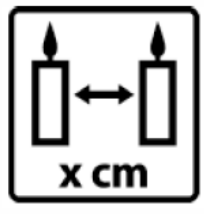
	<p>The supplementary safety symbols and text shall be reproduced as shown in Tables 1 to 3 and Tables A. 1 to A. 5. However, some degree of modification is permitted when cultural differences or special application formats (e.g. candle shape/type) need to be considered, provided the original meaning is retained and comprehension of the 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

WALTEK







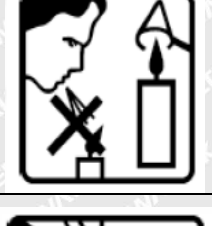


Report No.: WTF22F05097236C

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		
	Use in a suitable bowl filled with water	Not Present
Table A.1 – optional supplementary safety information		
	Keep candles at least x cm apart. Note: X represents the minimum safety distance between candles and is defined by the manufacturer.	Text Form Present



Report No.: WTF22F05097236C

	Do not burn in a draught.	Not Present
	Do not place near a heat source.	Not Present
	Place candle upright.	Not Present
	Trim wick to x cm, Note: x represents the maximum length of the wick and is defined by the manufacturer.	No Present
	Snuff out the flame. Do not blow it out.	No Present
	Keep wax pool clear of matches and debris.	Not Present
	Do not move a burning candle.	No Present




Report No.: WTF22F05097236C

	Never use liquid to extinguish.	Not Present
	Remove packaging before use.	Text Form Present
	Trim edge if higher than x cm. Note: x represents the maximum length of the wick and is defined by the manufacturer.	Not Present
Table A.2 – additional optional supplementary safety information – specific for tea light		
	Only use in holders and warning stoves with sufficient ventilation.	Not Present
Table A.3 – additional optional supplementary safety information – specific for votive candles		
	This candle liquefies, use a suitable container.	Not Present
Table A.4 – additional optional supplementary safety information – specific for container candles		
	Do not touch, may be hot.	Not Present
Table A.5 – Additional optional supplementary safety information – specific for candles not appropriate to use in a warming unit, e.g. scented tea lights		



Report No.: WTF22F05097236C

	Do not burn in a warming unit.	Not Present
---	--------------------------------	-------------

WALTEK



Report No.: WTF22F05097236C

8) 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 self-extinguishing.
Test Conclusion:	Pass

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 ≥ 12 mm in case of candles with a diameter of ≤ 14 mm and at a residual height of ≥ 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.	PASS

Abbreviation: NA =Not applicable



Report No.: WTF22F05097236C

Test data:

Sample ID	Wax weight (in net and g)	Size (mm)
A1	122.4	Φ 71.27 X 79.64
A2	117.7	Φ 71.05 X 79.62
A3	119.9	Φ 71.31 X 79.84

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	15	20	27.0	95.3%	0	8
A2	15	25	24.5	95.7%	0	8
A3	15	20	25.5	95.3%	0	8

Test data:

Sample ID	Wax weight (in net and g)	Size (mm)
B1	55.2	Φ 55.74 X 66.98
B2	55.8	Φ 55.87 X 67.06
B3	54.9	Φ 56.12 X 67.07

Sample ID	Flame height (mm)		Total burn time(hours)	Percentage of wax burnt (%)	Wax spillage(%)	Average after smoke or glow time (s)
	Maximum	Maximum				
B1	10	20	17.0	92.4%	0	8
B2	10	15	18.5	92.3%	0	8
B3	15	20	17.0	87.2%	0	8

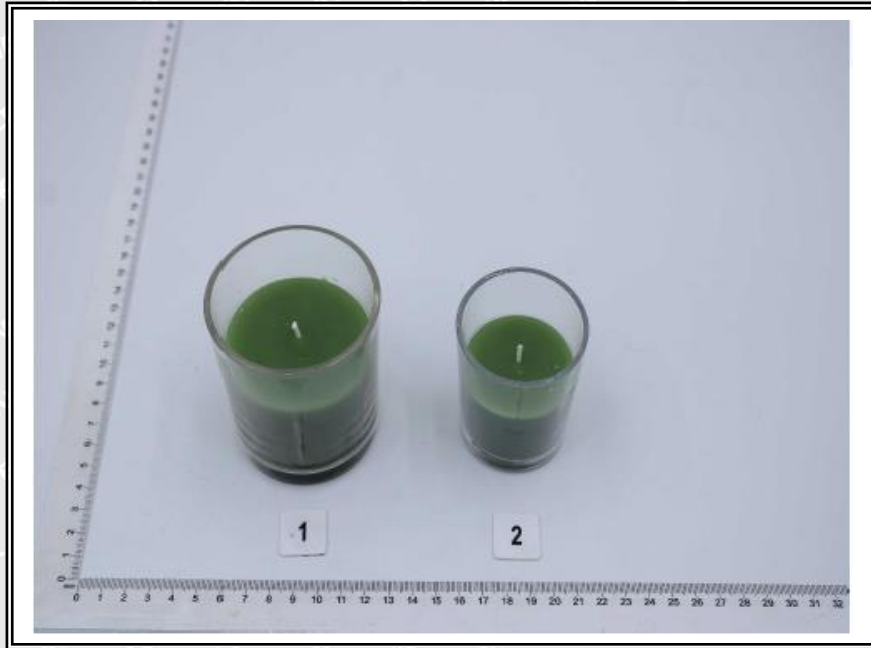
Test Material List:

Material No.	Sample Description	Location
1	Green Candle	Individual(CX1508)
2	Green Candle	Individual(CX1509)



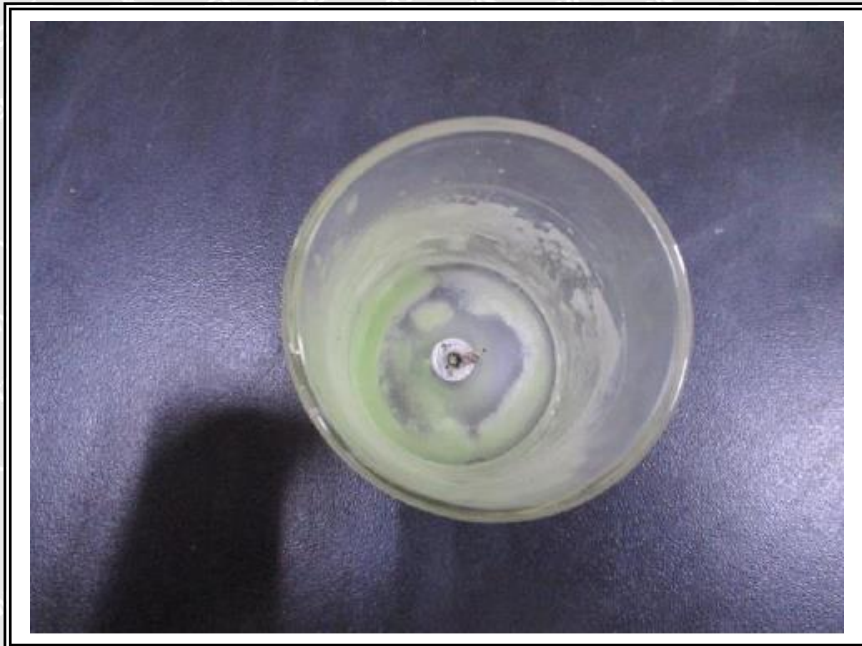
Report No.: WTF22F05097236C

Test sample photo:



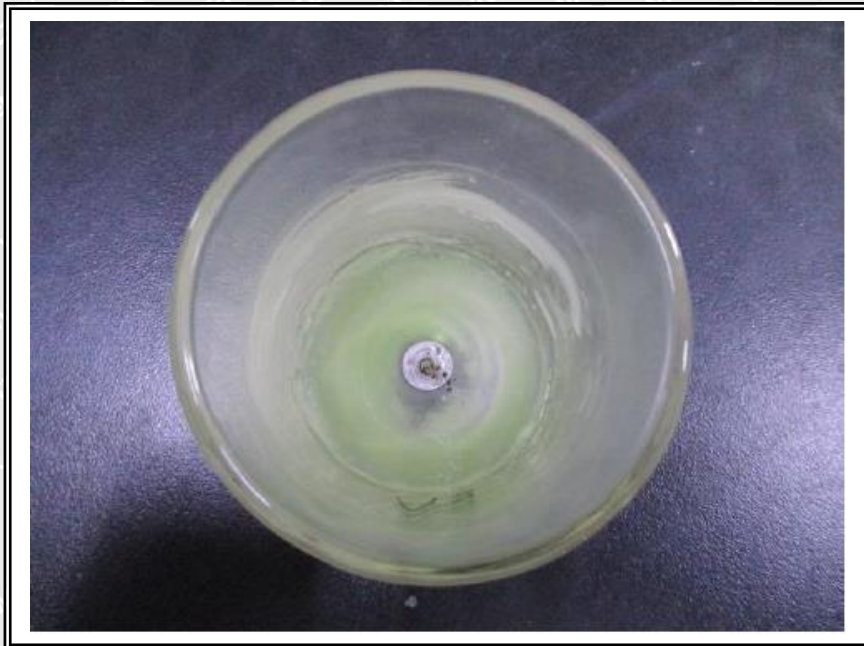


Report No.: WTF22F05097236C





Report No.: WTF22F05097236C



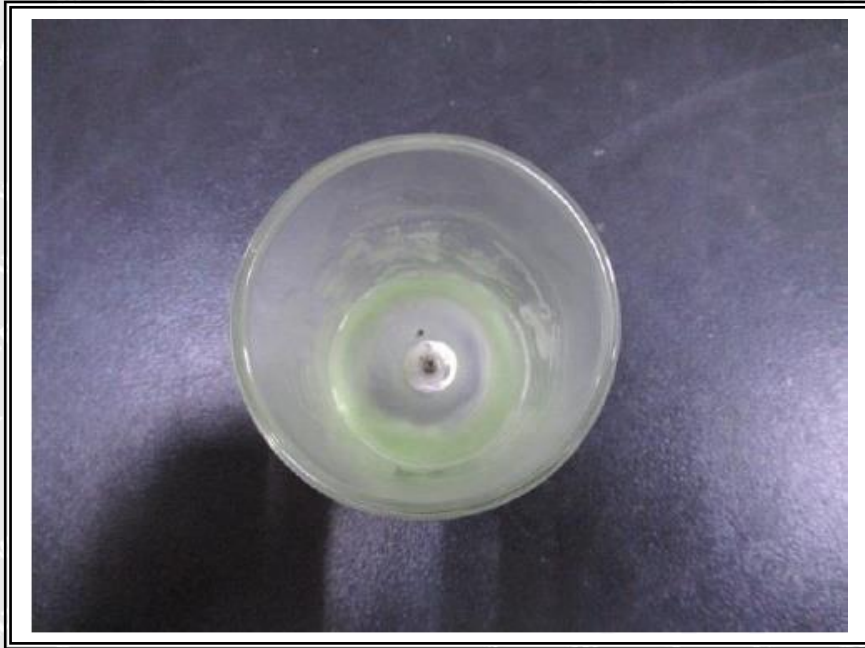


Report No.: WTF22F05097236C





Report No.: WTF22F05097236C



WALTEK



Report No.: WTF22F05097236C

Remarks:

1. The results shown in this test report refer only to the sample(s) tested;
2. This test report cannot be reproduced, except in full, without prior written permission of the company;
3. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver;
4. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which Waltek hasn't verified;
5. If the report is not stamped with the accreditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.

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

WALTEK