

Product specific requirements: 180. Candles, Tea lights, Outdoor candles and torches

Version: 4.0
Last update: 06.04.2022

Material	Products	Remark
-	Candles, Tea lights, Outdoor candles and torches	-

No	Parameter	Method	Reference	Requirement			
General requirements							
1	PrSG	-	SR 930.11	Have to fulfil requirements			
2	GPSD	-	2001/95/EEC	Have to fulfil requirements			
3	Food imitation directive	-	87/357/EEG	Have to fulfil requirements			
4	RAL Quality Mark for candles	-	RAL-GZ 041	Have to fulfil requirements			
5	REACH	-	EC 1907/2006	Have to fulfil requirements			
6	SVHC	-	EC 1907/2006	Have to fulfil requirements			
7	POPs regulation on Persistent Organic Pollutants	-	Regulation 2019/1021	Have to fulfil requirements			
8	Substances that deplete the ozone layer	-	1005/2009/EC	Have to fulfil requirements			
9	CLP; Classification, labelling and packaging	-	1272/2008/EC	Have to fulfil requirements			
Candles Requirements							
				Candles Tea lights Outdoor candles/Torches			
10	Sooting behavior	EN 15426: 2018	-	average soot index <1,0/hr	●	●	●
11	Sooting behavior	Lab inhouse	-	No visible release of soot.			●
12	Fire safety	EN 15493: 2019	-	Full compliance with standard	●	●	●
13	Fire safety	Lab inhouse	-	Full compliance with RAL-GZ 041/4			●
14	Burning evaluation	Lab inhouse	-	- Average burning time not less than specification, max deviation for a single sample: 10% below specified burning time Centered wick - 12 tea lights of representative sampling shall be evaluated. The average burning time shall be not less than the stated burning time. The maximum burning time deviation for a single sample shall be within 10 % of the stated burning time - Average burning time not less than specification, max deviation for a single sample: 10% below specified burning time Centered wick	●	●	●
15	Spillage	Lab inhouse	-	Taper: No dripped wax that reaches the bottom of the holder. Pillar and others: Max 10 %	●		
16	Clubbing on wick	Lab inhouse	-	Excessive clubbing not permitted	●		
17	Aftersmoke	Lab inhouse	-	Max 15 sec if candle diameter < 30 mm Max 20 sec if candle diameter ≥ 30 mm	●	●	
18	Deformation of containers (container candles) / cups	Lab inhouse	-	The container / cup must not be destroyed or deformed during normal use of the candle.	●	●	
19	Wax remainder		-	Max 2 g		●	
20	Wax pool temperature	Lab inhouse	-	Max 100°C		●	
21	Flame height	Lab inhouse. Measured from surface of wax to flame tip	-	14-30 mm		●	
22	Flammability of plastic tea light cups	ASTM F2417-17	-	Not flammable when tested according to standard		●	
23	Resistance to corrosion (metal cup)	ISO 9227	-	1 % salt solution for 24 hours)		●	
24	Flammability of plastic container (graveyard candles)	ASTM F2417-17	-	Not flammable when tested according to standard			●

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









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Construction / Workmanship Qualities / Performance Testing							
25	Substances of Very High Concern (SVHC)	Screening Test	-	0.1 % of each SVHC	•	•	
26	Heavy metals	ICP-MS EN 71-3	-	Nickel < 10 mg/kg Cadmium < 10 mg/kg Lead < 20 mg/kg Arsenic < 10 mg/kg Barium < 100 mg/kg Chromium (total) < 400 mg/kg	•	•	
27	Flame retardants	in House Methode	SR 814.81 (Chem RRV) Anhang 1.1; 1.2; 1.9 of Art. 3		•	•	
28	Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	GC-MS or GC-ECD	SR 814.81 Anhang 1.1, Ziffer 2, a)		•	•	
29	Polycyclic aromatic hydrocarbons, PAH	AfPS GS 2014:01	SR 814.81 (ChemRRV) Anhang 2.9, Ziffer 2e		•	•	
30	Dimethyl Fumarate (DMF)	GC-MS	SR 814.81 (ChemRRV) Annex 2.4, Ziffer 2.2		•	•	
31	Organotin Compounds	EN ISO 17353	SR 814.81 (ChemRRV) Annex 1.14; Art. 3		•	•	
32	Nickel Release*	EN ISO 11885, ICP-OES ; EN ISO 1811:2013	SR 817.023.41		•	•	
33	Toxicology			Only for Candles which Fragrances			•
34	Allergenicity			Only for Candles which Fragrances			•
Labeling							
35	Safety labelling	EN 15494:2019	Mandatory safety information according to standard		general warning sign		
					Never leave a burning candle unattended.		
					Burn candle out of the reach of children and pets.		
					Always leave at least xx cm between burning candles.		
					Do not burn candles on or near anything that can catch fire.		

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36	Safety labelling	EN 15949:2007	optional safety information according to standard		Do not place candles in a draught.
					Do not place candles near a source of heat.
					Place candles in an upright position.
					Trim wick to about 1 cm before lighting.
					Always snuff out the flame. Do not blow it out.
					Always use a candleholder.
					Keep the wax pool clear of matches and other debris to avoid flaring.
					Only use tea light in holders and warming stoves with sufficient ventilation.
					Use a suitable container as these candles liquefy when burning.
					Use a suitable container as these candles liquefy when burning.
37	Safety information (scented candles only)	EN 16740:2016	Mandatory safety information according to standard		Never use liquid to extinguish.
					Ventilate the room after use.
					Avoid direct inhalation of any smoke