



Certificate of analysis / Quality statement

Kit name: Teslacigs Shinyo Kit
Atomizer: Teslacigs Resin Tank
Mod: Teslacigs Shinyo Mod
Coil: TS-XX 0,18 Ohm
E-liquid: ZAZO Z01016008
Testing Period 15.04.2019 – 24.04.2019

Testprocedures/References

Sampling

- Machine for e-cigarettes aerosol generation and recording for routine analysis terms and standard conditions (draft DIN Standards Committee for Food and Agricultural Products NA057-04-01-05 AK)
- Preparations for inhalation, aerodynamic assessment (PharmEur 2.9.18)

Analytics

- Determination of aldehydes and ketones in air via reaction with 2,4-dinitrophenylhydrazine, separation and detection of the derivative method developed by Waters
- Determination of nicotine content by HPLC / UV method, method developed by BioChem Laboratory for biological and chemical analytics
- Determination of metals by AAS/GTT, method developed by Techpharm GmbH or ICP/MS DIN EN ISO 17294-2 / DIN 38406-1

In accordance with DIN-EN-ISO 9001: 2015 and 17025: 2005 samples were taken and tested by qualified laboratories by GMP conditions.

Results correspond based on safety level 100 for Chromium with expected values

24.04.2019

Head of Quality Control



Test item	Expected value	result	evaluation
Setting e-cigarette			
1. Resistance (Ohm)	0,18	0,18	corresponds
2. Wattage (W)	70	70	
3. Airflow	Fully opened	Fully opened	
Setting sample			
1. Puff duration	2 sec +/- 0,1	2	corresponds
2. Puff frequency	2/minute	2	
3. Number of puffs	60	60	
4. Negative pressure	200mbar	200 mbar	
Nicotin content *1			
1. Volume e-liquid puffed/60 puffs	>0,2 ml	2,5	corresponds
2. mg nicotin/10ml puffed*2	Minimum 10% = 16 mg	61 % (97 mg)	
3. mg nicotin/60 puffs*3		24,5	
Aldehyde + Keton-Emissions*4	(MAK mg/m3) -> µg /60 puffs		
1. Formaldehyde	(0,370) < 83	13,3	corresponds
2. Acetaldehyde	(91) < 20.475	13,9	
3. Acroleine	(0,25) -> < 56	1,4	
4. Actone	(1200) -> 270.000	2,4	
5. Others (Propionaldehyd, Crontonaldehyd,...)	Single value < 50	11,5	
Metal-Emissions*5	Mcg/60puffs*6		
1. Cr (Chromium)	2,9	6,4*	*corresponds with safety level 100 instead of recomenned safety level 1000
2. Ni (Nickel)	6,0	<0,2**	
3. AS (Arsenic)	1,9	<0,1**	**corresponds with safety level 1000
4. Cd (Cadmium)	3,4	<0,03**	
5. Hg (Mercury)	1,2	<0,01**	
6. PB (Lead)	5,0	<0,1**	

*1: E-Cigarette working group discussion paper on submission of notification under article 20 of Directive 2014/40/EU Chapter 4

*2: Nicotine dose in total by inhalation content of 10ml e-liquid under standard conditions

*3: Nicotine uptake of standard smoker smoking 6 cigarettes (10 puffs/cigarette)

*4: E-Cigarette working group discussion paper on submission of notification under article 20 of Directive 2014/40/EU Chapter 6.

Calculation expected value: MAK-Wert (mcg/m3) *0,225 (=breath volume puff duration 60 puffs= 30 minutes)

*5: E-Cigarette working group discussion paper on submission of notification under article 20 of Directive 2014/40/EU Chapter 3 e-cigarettes/ Chapter 6 e-liquids

*6: Inhalation maximum/day according Guideline for Elemental Impurities Draft 23.Juli.2013 Appendix 2, Table 2.1

Appendix 1: Method for Establishing Exposure Limits: 841: PDE = 1 mg/kg/day x 50 kg/[1 x 10 x 10 x 1 x 10] = 0.05 mg/day = 50 µg/day -> safety level = 1000



Picture of tested device



Teslacigs Shinyo Kit