

Certificate of analyses/Quality statement**E-cigarette: Starter Kit IJOY Solo Mini Kit 0,5 Ohm 30Watt****E-liquid: Z01016008**

Testprocedures/References

Sampling

- Machine for e-cigarettes for 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 by Waters, testing by BioChem Laboratory for Biological and Chemical Analysis GmbH
- Determination of nicotine content by HPLC / UV method , testing / method by BioChem Laboratory for biological and Chemische Analytik
- Determination of metals by AAS/GTT, testing/method by Techpharm GmbH

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

Results correspond with expected values

Date Signature

04.11.2016

Head of Quality Control

| Test item | Expected value | result | evaluation |
|--|-----------------------------------|--------------|-------------|
| Setting e-cigarette | Specification | | |
| 1. resistance (Ohm) | 0,5 | 0,49-0,52 | corresponds |
| 2. wattage (W) | 30 | 30 | |
| Setting sampler | | | |
| 1. Puff duration | 2 sec +/- 0,1 | 2 | corresponds |
| 2. Puff frequency | 2/minute | 2 | |
| 3. Number of puffs | 60 | 60 | |
| 4. negative pressure | 100-200mbar | 100-200 mbar | |
| Nicotin content * ¹ | | | |
| 1. Volume e-liquid puffed/60 puffs | >0,2 ml | 0,79 | corresponds |
| 2. mg nicotin/10ml puffed* ² | Minimum 10% = 16 mg | 100 | |
| 3. mg nicotin/60 puffs* ³ | | 9,5 | |
| Aldehyde + Keton-Emissions* ⁴ | (MAK (mcg/m3)) -> mcg/60 puffs | | |
| 1. Formaldehyde | (370) < 83 mcg | 5,7 mcg | corresponds |
| 2. Acetaldehyde | (91.000) < 20.475 mcg | 7,9 mcg | |
| 3. Acroleine | (250) -> < 56 mcg | 1,3 mcg | |
| 4. others (Acetone, Propionaldehyde, Crotonaldehyde, ..) | Single value < 50mcg | 18,2 mcg | |
| Metal-Emissions* ⁵ | Mcg/60puffs* ⁶ | | |
| 1. Al (Aluminium) | No limit | 13,7 | corresponds |
| 2. Cr (Chromium) | 0,29 | <0,05 | |
| 3. Fe (Iron) | No limit | <0,2 | |
| 4. Ni (Nickel) | 0,60 | <0,2 | |
| 5. Sn (Tin) | 6,40 | <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

*6: Inhalation maximum/day according Guideline for Elemental Impurities Draft 23.Juli.2013 Appendix 2, Table 2.1 x safety factor 10