

ICS 65.160

English Version

Electronic cigarettes and e-liquids - Constituents to be measured in the aerosol of vaping products

Cigarettes électroniques et e-liquides - Composants dont la teneur est à mesurer dans l'aérosol des produits de vapotage

Elektronische Zigaretten und Liquids für elektronische Zigaretten - Inhaltsstoffe, die im Aerosol von Verdampfungsprodukten gemessen werden

This Technical Report was approved by CEN on 4 June 2018. It has been drawn up by the Technical Committee CEN/TC 437.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Mandate	4
5 What is the purpose of the emissions reporting?	4
5.1 General.....	4
5.2 TPD guidance	5
5.3 Hardware versus e-liquids.....	5
6 Existing regulatory guidance on compounds to be measured.....	5
6.1 TPD	5
6.2 European Commission guidance	5
6.3 Member State guidance.....	6
6.4 Existing voluntary standards/specification.....	6
6.5 FDA	6
7 Recommended compounds to be measured in vaping aerosol.....	7
7.1 Aerosol versus e-liquid	7
7.2 Overall mass of aerosol yield and nicotine	8
7.3 Thermal degradation products.....	8
7.4 Hardware specific emissions	9
8 Recommendation	9
Bibliography.....	11

European foreword

This document (CEN/TR 17236:2018) has been prepared by Technical Committee CEN/TC 437 “Electronic cigarettes and e-liquids”, the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document is a preview generated by EVS

1 Scope

This document gives a list of constituents of interest proposed for measurement in the aerosol for the purpose of regulatory submission under the Directive 2014/40/EU (TPD) [2], for

- prefilled products such as disposable e-cigarettes and refill cartridges,
- e-liquids sold in refill containers,
- the following categories of hardware: coils or other heater elements of the vaping product, atomisers, rebuildable atomisers and all open tank or dripper products with inbuilt atomisers, including clearomisers.

This list is not intended to be comprehensive but rather, it represents the default minimum requirement. Depending on the device/liquid combination and the toxicological assessment other substances might have to be measured as well.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Mandate

TPD requires:

- “Manufacturers and importers of electronic cigarettes and refill containers shall submit a notification to the competent authorities of the Member States“ [...] “The notification shall, depending on whether the product is an electronic cigarette or a refill container, contain the following information:” [...];
- “(b) a list of all ingredients contained in, and emissions resulting from the use of, the product, by brand name and type, including quantities thereof”.

5 What is the purpose of the emissions reporting?

5.1 General

There can be many reasons to measure constituents in vaping aerosol. Different purposes will focus on different constituents to be measured and different aerosol generation protocols under which to measure them. TPD requires submission of data across the range of vaping products in order to allow comparisons between products, analogous to the required tar/nicotine/carbon monoxide measurements required for cigarettes under the TPD. This requires:

- a) constituents to be measured that can reasonably be expected to be present in all vaping products;
- b) measurement under a standardised machine vaping regime to allow comparisons. This regime should be consumer relevant.