1. Purpose

The purpose of this industry standard is to warrant transparency for the consumer regarding the quality of CBD oil in the Dutch market. Members of CAN (the Cannabinoids Association of the Netherlands), whose products comply with the standard, may request the CAN hallmark for these products.

2. Definitions

CBD is the abbreviation of Cannabidiol. CBD-paste is an extract of the flowering parts of the hemp plant, derived from one of the EU-permitted industrial hemp strains[1]. De extraction method should be suitable for use in food[2]. The resulting paste may undergo a further processing steps, such as a heating step to convert CBD-A into CBD and a winterization step to remove chlorophyll and bad-tasting fatty acids and waxes. CBD oil is a mixture of CBD paste and an edible oil, such as hemp seed oil, olive oil or coconut oil.

3. Regulatory status

a. Dutch "Opium Act"

In the Netherlands, CBD oil falls under the Opium Act and is illegal according to the Act:

- CBD oil complies to the definition of hemp-oil (Opiumwet schedule 1);
- CBD oil contains traces of THC (Opiumwet schedule 1);
- Industrial hemp complies to the definition of cannabis. It is not permitted to cultivate, extract, prepare, etc. cannabis (Opiumwet art 3);
- Only fibre and seed may be gained from industrial hemp (Opiumwetbesluit art 12).

Nevertheless, CBD oil is condoned in the Netherlands as herbal product under the Opium Act, if it complies to the following prerequisites:

- CBD oil is manufactured from EU permitted industrial hemp strains.
- CBD oil does not contain more than 0.05% (w/w) THC[3].

b. Novel Food Regulation

As long as CBD oil is covered by the Opium Act, the Novel Food Regulation[4] does not apply.

Pure CBD, or other cannabinoids (except THC), both of natural and synthetic origin, are by definition Novel and prohibited for use in food and food supplements[5].

[1] http://ec.europa.eu/food/plant/plant_propagation_material/plant_variety_catalogues_databases/search/
[2] Directive 2009/32/EC
[3] Max 0,05% THC is considered a technical unavoidable contaminant. This maximum limit is only applicable to products for the Dutch market.
[4] Regulation (EU) 2015/2283 regarding Novel Foods
[5] http://ec.europa.eu/food/safety/novel_food/catalogue/search/public/index.cfm# search: Cannabis sativa L., Cannabidiol, Cannabinoids

4. Maximum daily dose

The maximum recommended daily dose = 160 mg CBD[6]. It is also possible to recommend a lower maximum dose, e.g.: do not exceed the recommended daily dose.
Each label should contain the maximum recommended daily dose stated as the number of drops. The number of drops is dependent on the quality of the CBD oil (extraction method, strength, choice of edible oil) and the dropper. For each combination of CBD oil and dropper, the manufacturer should determine the maximum number of drops.

5. Claims

Medical claims are not permitted. Not on the primary or secondary packaging, nor on any marketing material, including flyers, folders, advertisements, websites, blogs, etc.
Health claims are only permitted for ingredients that have been submitted to and approved by EFSA[7]. Until now, no claims have been submitted/approved for CBD or hemp extracts.

6. Labelling requirements[8]

a. Name of the product
b. List of ingredients in descending quantity, per annex VII (EU/1169/2011)
c. Allergen declaration, per annex II (EU/1169/2011)
d. Net quantity
e. The CBD percentage in the final product
f. Date of minimum durability, per annex X (EU/1169/2011)
g. Batch code
h. Storage conditions
i. Instructions for use (e.g. shake well and drop under the tongue)
j. Dosage recommendation for daily consumption
k. A warning not to exceed the stated recommended daily dose
l. Name and address of the food business operator
m. Statement “Food supplement”
n. Do not use during pregnancy or breastfeeding
o. A statement to the effect that food supplements should not be used as a substitute for a varied diet
p. A statement to the effect that the product should be stored out of the reach of young children
q. No statement regarding the THC percentage
r. No statement regarding the source material (industrial hemp)

When products are made available on-line (via internet) the required information must also be made available, except for the batch code and date of minimum durability. This can be provided directly with the product or accessible via a hyperlink. Consumers must be able to see this product information online before purchase.

[6] Max 160 mg CBD per day is based on the lowest effective dose found in clinical literature. This maximum value is only applicable to products for the Dutch market.
[7] http://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register.home
[8] According to EU/1169/2011 and 2002/46/EC

7. Test procedures

#	Parameter	Specification	Method[9]
1	Appearance	Yellow to orange to dark green clear to turbid viscous liquid	Visual
2	Scent	Typical of hemp and the edible oil of choice	Sensory
3	Density/Relative density	To be determined in-house for each specific quality	Pycnometer/Densitometer
4	Peroxide value	Max. 5 meq/kg	ISO 3960
5[10]	Heavy metals[11]		
	Lead Cadmium Mercury	Max. 3,0 mg/kg Max. 1,0 mg/kg Max. 0,1 mg/kg	Regulation (EC) 333/2007
6[10]	Pesticides	Acc to Regulation (EC) 396/2005	SANTE/11945/2015
7[10]	Mycotoxins[12]		
	Aflatoxin B1 Aflatoxins B1+B2+G1+G2	Max. 2 µg/kg Max. 4 µg/kg	Regulation (EC) 401/2006 Annex II
8[10]	Polycyclic Aromatic Hydrocarbons[13]		
	Benzo(a)pyrene: Benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene:	Max. 2 µg/kg Max. 10 µg/kg	Regulation (EC) 333/2007
9[10]	Dioxins and PCB's[14]		
	Sum of dioxins: Sum of dioxins and dioxin-like PCBS: Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180:	Max. 0,75 pg/g Max. 1,25 pg/g Max. 40 ng/g	Regulation (EU) 2017/644
10	Microbiology[15]		
	TAMC TYMC E. coli	Max. 10^3 CFU/ml Max. 10^2 CFU/ml Absent in 1 ml	ISO 4833-1
11	Residual solvents	Acc to Ph Eur 5.4	Ph Eur 2.4.24
12	Content CBD	Label declaration +/- 10% (w/w)	in-house method
13	Content CBD-A[16]	Label declaration +/- 10% (w/w)	in-house method
14	Content THC	Max. 0,05% (w/w)	in-house method
15	Content THC-A	Max. 0,05% (w/w)	in-house method
16	Fingerprint cannabinoid profile	Acc to company standard	in-house method

[9] See Annex 1 1 for list of approved laboratories
[10] These tests do not have to be performed in the final product if they have been performed in the paste and the results comply to the specifications
[11] Specifications are based on EU 1881/2006 dd. 01-01-2016 as laid down in the Annex (3.2.21, 3.1.22, 3.3.3)
[12] Specifications are based on Ph Eur 6.0 requirements for Herbal Drugs.
[13] Specifications are based on EU 1881/2006 dd. 01-01-2016 as laid down in the Annex (6.1.1).
[14] Specifications are based on EU 1881/2006 dd. 01-01-2016 as laid down in the Annex (5.12).
[15] Specifications are based on Ph Eur 5.1.4 – Non-aqueous preparations for oral use
[16] Specification is only applicable if the CBD-A content is declared on the label

Annex 1 – list of laboratories

1. The appointed laboratories for tests 11 till 16 are:

   - BrightLabs[17]
     St. Jansweg 20
     5928 RC Venlo
     Netherlands

   BrightLabs can also perform all other tests, except 7, 8 and 9.
   CAN members receive a 25% discount on the tests at BrightLabs. The reporting lead time is 7 working days after receipt of the samples. The discount is not applicable in case of a lead-time of 5 working days.

   - Eurofins PROXY Laboratories[17]
     Archimedesweg 25
     2333 CM Leiden
     Netherlands

   Proxylab can also perform all other tests, except 8.
   CAN members receive a 25% discount on the tests at Proxylab. The reporting lead time is 10 working days after receipt of the samples.

   - ÖHMI Analytik GmbH
     Berliner Chaussee 66
     39114 Magdeburg
     Germany

   Öhmi can also perform all other tests.
   CAN does not (yet) have any agreement with Öhmi regarding a discount for members. The reporting lead time is 7 working days after receipt of the samples. For a lead time of 24 hours a surcharge of 100% is calculated and for 48 hours there is a surcharge of 50%.

   - Dept of Food Analysis and Nutrition (UAPV), UCT Prague
     Technická 3
     16628 Praha 6
     Czech Republic

   CAN does not (yet) have any agreements with UAPV about analyses, prices and lead times.

[17] No "Opiumontheffing" is required of the client if the sample contains less than 0,05% (w/w) THC. Samples that contain more than 0,05% (w/w) THC are reported with IGJ.

2. The other tests (1 till 10) may also be performed by any of the following laboratories. These laboratories do not perform the assays on cannabinoids and only and only test if the assays have already been performed and the sample does not contain more than 0,05% THC!
   - NutriControl
     N.C.B. laan 52
     5462 GE Veghel
     Netherlands

   - NofaLab
     Jan van Galenstraat 41/51
     3115 JG Schiedam
     Netherland