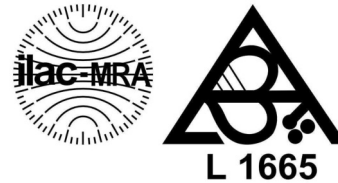




THC free - CSF Extract 50% CBD equivalent

CAS Number:	89958-21-4		
HS Code:	3202 10 – Aromas for Food or Drink		
Plant/extract ratio:	1÷15 - 1÷25 depending on quality of the biomass		
Phytocannabinoids:	50% standardized CBD, fully decarboxylated		
Other natural constituents:	terpenes cca 0.5%		
Plant parts Genus/Species:	inflorescence, <i>Cannabis sativa</i> L., as per <i>EU Common Catalogue</i>		
Organoleptic aspect:	Amber, viscous liquid, solid at 50°C, liquifies at 50°C, earthy, after pine, like pepper		
Nutritional profile per 100g:	Energy: 1440kJ/348 kCal, Fats 35g, of which Saturates 9g, Carbohydrates 8.2g, of which Sugars 0.8g, Fiber 0g, Protein 1.55g, Salt 0.01g		
GACP/EU Bio certified:	No/No		
HACCP/Certified:	Yes/No		
Chemical tests		Microbiological tests	
Cannabidiol	49-51%	Total Plate Count	<10 cfu/g
C3 and C4 homologues	≤1.0 %	Yeast and Mold	<10 cfu/g
THC	n.d.	Enterobacteriaceae	absent (cfu/25g)
Moisture	1.0%	Salmonella	absent (cfu/25g)
Ash	3.75%	E. coli	absent (cfu/25g)
		Aflatoxins	
		B1, B2, G1, G2	<4 ppb
		B1	<1 ppb
		Contaminants	
Pb	<0.10 mg/kg	Pesticides	<0.01 mg/kg
Cd	<0.10 mg/kg	PAHs	<0.05 mg/kg
As	<0.10 mg/kg	Residual Class III solvents	≤500 mg/kg
Hg	<0.01 mg/kg		
Solubility:	vegetable fats, alcohols, creates emulsion with water		
Usage:	Flavouring preparation as per EC/1334/2008, Art. 3.2(d)(i). Use for food with maximum recommended addition of 10% w/w. Not for retail sale.		
Dispensing:	Heat container in water bath to 50°C before emptying.		
Disclaimer:	This product is not intended to diagnose, treat, cure or prevent any disease		
Packaging:	HDPE jar / glass bottle		
Shelf life:	24 months from date of production in cool and dark place.		
MOQ:	500 g		
Supplier:	Valeo Laboratories Valeo GmbH Gildeallee 5, DE 25704 Meldorf info@valeo-laboratories.com, www.valeo-laboratories.com tel.: +49 (0)4832 - 9786 000		

E&H services Inc.
Testing laboratory
CAI Accredited Testing Laboratory No. 1665
according to ČSN EN ISO/IEC 17025:2005
building VÚHŽ, 739 51 Dobrá 240



TEST REPORT No. 1379/2018

Customer : Valeo Laboratories, Germany

Set No. : 554/2018

Sample Received : 8.11.2018 12:00

Sample Analyzed : 8.11.2018 - 27.11.2018

Order No. : CBD2018360

ID : 04801938

Information about sample No.: 1593

Sampling Date and Time : Not mentioned
Sample name : THC free CSF Extract 50% CBD, CSF2018/013
Sample type : Vegetable materials
Sampled by : Customer
Sampling purpose : On the customer request

Results - chemical analysis

Parameter	Value	Unit	Kind	Method used	Uncertainty
Pb	<0,00010	mg/g	SA	SOP OV 201.10	---
Cd	<0,00010	mg/g	SA	SOP OV 201.10	---
As	<0,00010	mg/g	SA	SOP OV 201.10	---
Hg	<0,000010	mg/g	SA	SOP OV 200.03	---
cannabidiol (CBD)	500	mg/g	A	SOP 15.02	± 30%
delta-9-tetrahydrocannabinol (THC)	<0,00015	mg/g	A	SOP 15.02	---
Polar compounds	see Appendix	see Appendix	N	SOP 11.00	± 30%

Notice to sampling : The sampling itself is not a subject of accreditation.
This protocol replaces the protocol no.1323/2018. Appendix is an inseparable part of the report.
delta-9-tetrahydrocannabinol (THC) = 0,000 %

Method specification :

SOP OV 200.03 (ČSN 75 7440)
SOP OV 201.10 (ČSN EN ISO 17294-1, ČSN EN ISO 17294-2)

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Results are only for tested samples.

These expanded uncertainties of measurement are obtained by multiplying of standard uncertainty of measurement by extending coefficient $k=2$ (for confidence level 95%). Uncertainty of sampling not included.

"<" - result is below the detection limit, ">" - result is higher than mentioned value

Methods in Kind column: "A" accredited test, "N" non-accredited test, "SA" accredited subdelivery

Checked by : Lisník Jiří, Mgr.
Completed by : Lisník Jiří, Mgr.
Number of pages : 2
Date : 27.11.2018



Tomáš Ocelka, Dipl. Ing., Ph.D.
head of Testing Laboratory



	1593 µg/g
Imazethapyr	< 0.01
Thifensulfuron-methyl	< 0.01
Methamidophos	< 0.01
Dimethoat	< 0.01
Atrazin_desethyl	< 0.01
Metoxuron	< 0.01
Phosphamidon	< 0.01
Cyanazin	< 0.01
Metribuzin	< 0.01
Simazin	< 0.01
Bromacil	< 0.01
Carbofuran	< 0.01
Hexazinon	< 0.01
Thiophanate-methyl	< 0.01
Monolinuron	< 0.01
Chlorotoluron	< 0.01
Isoproturon	< 0.01
Metobromuron	< 0.01
Atrazin	< 0.01
Desmetryn	< 0.01
Methabenzthiazuron	< 0.01
Diuron	< 0.01
Methidathion	< 0.01
Ethofumesat	< 0.01
Azoxystrobin	< 0.01
Linuron	< 0.01
Terbutylazine	< 0.01
Chlorbromuron	< 0.01
Propyzamide	< 0.01
Prometryn	< 0.01
Metolachlor	< 0.01
Fenhexamid	< 0.01
Fenarimol	< 0.01
Acetochlor	< 0.01
Terbutryn	< 0.01
Kresoxim-methyl	< 0.01
Tebuconazole	< 0.01

	1593 µg/g
Propiconazole	< 0.01
Phorate	< 0.01
Phosalone	< 0.01
Fluazifop-p-butyl	< 0.01
Tri-allate	< 0.01
Alachlor	< 0.01
Metalaxyl	< 0.01
Atrazin-desethyl-desisopropyl	< 0.01
Atrazin-hydroxy	< 0.01
Atrazin-desisopropyl	< 0.01
Triadimenol	< 0.01
Lenacil	< 0.01
Triadimefon	< 0.01
Metazachlor	< 0.01
Propachlor	< 0.01
Terbutylazine-hydroxy	< 0.01
Terbutylazine-desethyl	< 0.01
Dimethachlor	< 0.01
Carbendazim	< 0.01
Napropamide	< 0.01
Methoxyfenozide	< 0.01
Triasulfuron	< 0.01
Alachlor_ESA	< 0.01
Acetochlor_ESA	< 0.01
Dimethomorph	< 0.01
Chloridazon	< 0.01
Chlorsulfuron	< 0.01
Metolachlor_ESA	< 0.01
MetolachlorOA	< 0.01
Sulfosulfuron	< 0.01
Triticonazole	< 0.01
Dicamba	< 0.01
Bentazone	< 0.01
Bromoxynil	< 0.01
2,4-D	< 0.01
MCPA	< 0.01
Dichlorprop	< 0.01
MCPP_MECOPROP	< 0.01
MCPB	< 0.01
2,4,5-T	< 0.01
Alachlor_OA	< 0.01
Acetochlor_OA	< 0.01

The appendix is an inseparable part of the test report
It can be reproduced with this test report only.

Tomáš Ocelka, Ph.D.
Head of Testing laboratory

Worked up by: Lisník Jiří, MSc.
Checked by: Lisník Jiří, MSc.



Valeo Laboratories | Valeo GmbH
Gildeallee 5, DE-25704 Meldorf, Germany
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tel. +49 (0) 4832 9786 000



Declaration of compliance

This is to declare that our products

(-)-trans-Cannabidiol (CBD) isolate

Cannabigerol (CBG) isolate

CSF Extract THC-Free

are produced in compliance with food legislation valid in Germany and our production process follows Hazard Analysis and Critical Control Points (HACCP) and good manufacturing practices for production of foods.

Ilonka Meinert
Owner & CEO
Valeo GmbH, Germany

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation 12. May 2017
Date of revision Version 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Substance / mixture THC free CSF Extract - 50% CBD
mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use of the mixture Food, cosmetic raw material. For professional use only.

Not recommended use of the mixture The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Manufacturer
Name or trade name Valeo Laboratories | Valeo GmbH
Address Gildeallee 5, DE-25704 Meldorf, Germany

Phone +49 (0) 4832 9786 000
Competent person responsible for the safety data sheet
Name Olaf Meinert
E-mail o.meinert@valeo-one.de
- 1.4. Emergency telephone number**
Poisoning information centre, Berlin - Emergency 030-19240 - Non emergency 030-30686799, Information on health risks only - acute poisoning of humans and animals

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Full text of all classifications and H-phrases is given in the section 16.

The most serious adverse physico-chemical effects
Unknown
The most serious adverse effects on human health and the environment
Unknown
- 2.2. Label elements**
none
- 2.3. Other hazards**
Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

The mixture hemp extract without THC, composed of cannabinoid compounds, terpenes, oils, waxes and water.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
CAS: 13956-29-1	2-[(1R,6R)-3-methyl-6-prop-1-en-2-ylcyclohex-2-en-1-yl]-5-pentylbenzene-1,3-diol	45-55		

Full text of all classifications and H-phrases is given in the section 16.

SECTION 4: First aid measures

- 4.1. Description of first aid measures**
If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet.
Inhalation
not available

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation	12. May 2017	Version	1.0
Date of revision			

Skin contact

Remove contaminated clothes. Rinse with plenty of lukewarm water with soap. Provide medical treatment if skin irritation persists.

Eye contact

Rinse the eyes immediately with a flow of running water, open the eyelids wide (also using force if needed); remove contact lenses immediately if worn by the person. Rinse for at least 15 minutes. Seek medical treatment if eye irritation persists.

Ingestion

not available

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

not available

Skin contact

not available

Eye contact

May cause slight irritation.

Ingestion

not available

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

foam, carbon dioxide, powder, water splitting of water, water mist

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Follow the instructions in Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per Section 13. Collected material should be disposed of in accordance with locally valid regulations. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with extended scope of competencies. After removal of the product, wash the contaminated site with plenty of water or another suitable cleaning material.

6.4. Reference to other sections

7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent the formation of gases and vapors. The product should be used only in areas where it is not in contact with open fire and other ignition sources. Don't smoke. Protect against direct sunlight. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight.

7.3. Specific end use(s)

not available

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation 12. May 2017
Date of revision Version 1.0

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protection glasses.

Skin protection

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Antisliding work boots. Contaminated skin should be washed thoroughly.

Respiratory protection

In normal use is not needed.

Thermal hazard

not available

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	viscous liquid
Physical state	solid at 20°C
color	amber
Odour	earthy, after pine, like pepper
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	>100 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	0.95-0.99 (voda=1)
Solubility(ies)	
solubility in water	nerozpuštný
solubility in fats	soluble
in alcohol	soluble
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

9.2. Other information

Density	data not available
ignition temperature	data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation	12. May 2017	Version	1.0
Date of revision			

10.2. Chemical stability

Under normal conditions, the mixture is stable. When exposed to temperatures below 15 ° C can harden (after exposure at 80 ° C for one hour again liquefy).

10.3. Possibility of hazardous reactions

not available

10.4. Conditions to avoid

Avoid contact with strong oxidizing agents, light.

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

not available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the substance.

Acute toxicity

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Data for the mixture are not available.

12.2. Persistence and degradability

The product is biodegradable.

12.3. Bioaccumulative potential

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation	12. May 2017	Version	1.0
Date of revision			

not available

12.4. Mobility in soil

not available

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act).

15.2. Chemical safety assessment

not available

SECTION 16: Other information

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



THC free CSF Extract - 50% CBD

Date of creation	12. May 2017	Version	1.0
Date of revision			

CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. First aid principles after the exposure to the chemicals. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.