uHemp Cannabidiol

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1. Product identifier

Product Name: (-)-cannabidiol
Other Name: CBD
CAS Number: 13956-29-1
IUPAC Name: 2-[(1R,6R)-3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Manufacture of substances, Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Company: uHEMP CANNABIDIOL
Place of business: 77 Sir John Rogersons Quay, Dublin 2, Ireland
Reg. No.: 601859
Competent person: sales@uhemp.eu

1.4. Emergency telephone number

Irish Chemical Helpdesk, Chemical Policy & Services Head
Address: 3rd Floor, Hebron House, Hebron Road, Kilkenny, Ireland.
Telephone 1: 1890 289 389
Telephone 2: Overseas: +35316147000

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

This substance is non-hazardous, non-toxic and non-flammable according classification criteria of the EC directive 1272/2008 [EU-GHS/CLP].

2.2. Label elements

This substance is non-hazardous, non-toxic and non-flammable according classification criteria of the EC directive 1272/2008 [EU-GHS/CLP].

2.3. Other hazards

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product Name: Cannabidiol
Synonyms: CBD
Formula: $C_{21}H_{30}O_2$
Purity: > 99%
Molecular Weight: 314.47
CAS Number: 13956-29-1
EINECS: 200-659-6

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Consult a doctor and show this safety data sheet.

If inhaled

Remove to fresh air and monitor breathing. If breathing stops, give artificial respiration. Consult a doctor.

In case of skin contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

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

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3. Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

Combustible solid which burns but propagates flame with difficulty. Avoid generating dust (dust-air mixture can result in a fire or dust explosion). Thermal decomposition can lead to release of carbon monoxide (CO) and carbon dioxide (CO_2).

5.3. Precautions for fire-fighters

Alert Fire Brigade and tell them location and nature of hazard. Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing – see section 8 of MSDS. Evacuate personnel to safe areas. Avoid dust formation. Ensure adequate ventilation. Avoid breathing vapours, mist, dust or gas.

6.2. Environmental precautions

Do not let product enter drains, surface and ground water.

6.3. Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite). Using non-spark tools sweep up material and place in an

appropriate container. After removal, ventilate and decontaminate surfaces and equipment with alcohol. Hold all material for appropriate disposal as described under section 13 of

6.4. Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Recommended storage temperature: < 25 °C (< 77 °F).

7.3. Specific end use(s)

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering measures

Ensure adequate ventilation, use in a fume hood where applicable. Ensure all engineering measures described under section 7 of MSDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Individual protection measures, such as personal protective equipment

Eye/face protection:	Use appropriate safety glasses.
Skin protection:	Use appropriate chemical resistant gloves. Gloves should be inspected before use. Wash and dry hands thoroughly after handling.
Body protection:	Wear appropriate protective clothing (lab coat).
Respiratory protection:	If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	White crystalline solid
Odor:	Odorless
Odor threshold:	No data available*
pH:	Does not apply
Melting point/freezing point:	66 °C (151 °F)
Boiling point and boiling range:	214-225 °C (417-437 °F)
Flash point:	206 °C (403 °F)
λ_{MAX}:	209.275 nm

Flammability	No data available*
Upper/lower flammability or explosive limits:	No data available*
Vapor pressure:	Negligible
Vapor density:	No data available*
Relative density:	No data available*
Solubility(ies):	250 μg/mL in 1:3 DMSO:PBS (pH 7.2); 36 mg/mL in EtOH, DMSO and DMF, insoluble in water
Partition coefficient:	No data available*
Auto-ignition temperature:	No data available*
Decomposition temperature:	No data available*
Viscosity:	Does not apply (solid)
Explosive properties:	No data available*
Oxidising properties:	No data available*

*) The chemical and physical properties have not been fully investigated.

9.2. Other safety information

No data available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stable under recommended transport or storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat, light, moisture.

10.5. Incompatible materials

Strong oxidants, strong acids/alkalis.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of carbon monoxide (CO) and carbon dioxide (CO_2).

11. TOXICOLOGICAL INFORMATI

11.1. Information on toxicological effects

Acute toxicity

Intravenous (mouse) LD50:	50 mg/kg
Intravenous (dog) LD50:	>254 mg/kg
Intravenous (monkey) LD50:	212 mg/kg
Oral (monkey) TDL:	27 g/kg
Oral (mouse) TDL:	750 mg/kg

Skin corrosion/irritation

Classification criteria are not met based on available data

Serious eye damage/irritation

Classification criteria are not met based on available data

Respiratory or skin sensitisation

Classification criteria are not met based on available data

Germ cell mutagenicity

Classification criteria are not met based on available data

Carcinogenicity

No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Classification criteria are not met based on available data

Specific target organ toxicity – single exposure

Classification criteria are not met based on available data

Specific target organ toxicity – repeated exposure

Classification criteria are not met based on available data

Aspiration hazard

Classification criteria are not met based on available data

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Long-term exposure to high dust concentration may cause changes in lung function.

Symptoms / Routes of exposure

Inhalation: The material is not thought to produce adverse health effects (as classified by EC directives), however in some cases there may be irritation of respiratory tract.

Ingestion: Although ingestion is not thought to produce harmful effects (as classified by EC directives), in some cases it may be harmful if swallowed.

Skin: There may be mild irritation at the site of contact.

Eyes: There may be irritation and redness.

Additional Information

RTECS No: VH1600000

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin.

The chemical, physical and toxicological properties have not been fully investigated.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

As supplied, the preparation is not expected to present significant adverse environmental effects. Avoid release into the environment and treat as potentially toxic.

12.2. Persistence and degradability

No data available

12.3. Bio accumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The material is not classified as PBT or vPvB.

12.6. Other adverse effects

May be harmful to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products

Transfer to a suitable labelled container and arrange for collection by specialized disposal company in accordance with national legislation. Treat as potentially toxic.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with national legislation.

Legislation of waste

Council directive 2008/98/EC on waste, last amended.

14. TRANSPORT INFORMATION

14.1. UN-Number

ADR/RID: -
IMDG: -
IATA: -

14.2. UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3. Transport hazard class(es)

ADR/RID: -
IMDG: -
IATA: -

14.4. Packing group

ADR/RID: -
IMDG: -
IATA: -

14.5. Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.

14.6. Special precautions for users

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

14.8. Applicable HS class

29072900

15. REGULATORY INFORMATION

This material safety data sheet complies with the regulation 1907/2006/EC (REACH) as amended by regulation 453/2010/EU.

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

No data available.

15.2. Chemical safety assessment

A chemical safety assessment has not been made for this product.

16. OTHER INFORMATION

16.1. List of hazard statements (H statements)

None

16.2. List of selected precautionary statements (P statements)

P232: Protect from moisture.

P235 + P410: Keep cool. Protect from sunlight.

P262: Do not get in eyes, on skin, or on clothing.

P263: Avoid contact during pregnancy/while nursing.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

16.3. Revision date

2018-01-02

16.4. Revision note

No data available.

16.5. Additional information about this product

No data available.

16.6. Copyright

UHEMP

16.7. Disclaimer

The above information is believed to be accurate but does not purport to be all inclusive and should be used as a guide only for experienced personnel. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The product must not be – unless specifically approved by the manufacturer/importer – used for purpose other than stated in this document. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

16.8. Key to the abbreviations and the acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road

CAS Unique numeric identifier used in chemistry for chemical substances

CBD Cannabidiol

CLP Classification, Labelling and Packaging

COSHH Control Of Substances Hazardous to Health

EC European Community

GHS Globally Harmonised System of classification and labelling of chemicals
HS Harmonised System of tariff nomenclature
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods Transport
LD50 Lethal dose of a substance in which it can be expected death of 50% of the population
MSDS Material Safety Data Sheet
PBT Persistent, Bio accumulative and Toxic
PPE Personal Protective Equipment
REACH Registration, Evaluation, Authorisation and restriction of Chemicals (EP and Council Regulations 1907/2006/EC)
RID Regulations concerning the international railway transport of dangerous goods
RTECS Registry of Toxic Effects of Chemical Substances
TIC Toxicological Information Centre
TDL Toxic Dose Low
UN Four-digit code reflecting the characteristics of substances or mixtures in transport
vPvB Very Persistent and Very Bio accumulative

16.9. Training guidelines

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

END OF SAFETY DATA SHEET