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

1.1 Product identifiers

Product name	CBD Quick Test
Product contents	1 x 60 mL 100% Isopropanol - **Extraction Solution**
	3 x 50 mg Potassium Hydroxide - **Extraction Tubes**

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

Relevant identified uses	Product for analytical use

1.3 Details of the supplier of the safety data sheet

Company	Plantchek
E-mail	contact@plantchek.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Isopropanol	Flammable liquids (Category 2), H225
	Eye irritation (Category 2A), H319
	Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Potassium Hydroxide	Corrosive to metals (Category 1), H290
	Acute toxicity, Oral (Category 4), H302
	Skin corrosion (Category 1A), H314
	Serious eye damage (Category 1), H318
	Short-term (acute) aquatic hazard (Category 3), H402

2.2 GHS Label elements, including precautionary statements

Isopropanol

Pictogram



Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

Potassium Hydroxide

Pictogram



Signal word: Danger

Hazard statement(s)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.

Precautionary statement(s)

P234	Keep only in original packaging.
P260	Do not breathe dust or mist.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Isopropanol	May form explosive peroxides.
Potassium Hydroxide	None

SECTION 3: Composition/information on ingredients

3.1 Substances

Isopropanol

Synonyms	2-propanol sec-propyl alcohol isopropyl alcohol
Formula	C_3H_8O
Molecular weight	60.10 g/mol
CAS No.	67-63-0

Component	Classification	Concentration (weight percent)
2-Propanol	Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3; H225, H319, H336 Concentration limits: ≥20%: STOT SE 3, H336	≤100%

Potassium Hydroxide

Synonyms	N/A
Formula	HKO
Molecular weight	56.11 g/mol

CAS No. 1310-58-3

Component	Classification	Concentration (weight percent)
Caustic potash	Met. Corr. 1; Acute Tox. 4; Skin Corr. 1A; Eye Dam. 1; Aquatic Acute 3; H290, H302, H314, H318, H402 Concentration limits: ≥1%: Met. Corr. 1, H290	≤100%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

All reagents — Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

All reagents — If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Isopropanol — Wash off with soap and plenty of water. Consult a physician.

Potassium Hydroxide — Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Isopropanol — Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Potassium Hydroxide — Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

All reagents — Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

All reagents — The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

All reagents — No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Isopropanol — Dry powder, or dry sand. **Do NOT use water jet.**

Potassium Hydroxide — Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Isopropanol	Carbon oxides
Potassium Hydroxide	Potassium oxides

5.3 Advice for firefighters

All reagents	Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Additional Information

Isopropanol	Use water spray to cool unopened containers.
Potassium Hydroxide	No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Isopropanol	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
Potassium Hydroxide	Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Isopropanol	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Potassium Hydroxide	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Isopropanol	Contain spillage, and then collect with non-combustible absorbent material, (e.g., sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13).
Potassium Hydroxide	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

All reagents	For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Isopropanol	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition. No smoking. Take measures to prevent the build up of electrostatic charge.

Potassium Hydroxide	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Isopropanol	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas. Hygroscopic. Storage class (TRGS 510): 3: Flammable liquids
Potassium Hydroxide	Keep container tightly closed in a dry and well-ventilated place. Handle under nitrogen, protect from moisture. Store under nitrogen. Strongly hygroscopic. Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

7.3 Specific end use(s)

All reagents	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Isopropanol

Components	CAS-No.	Value	Control parameters	Basis
2-Propanol	67-63-0	TWAEV	400 ppm 983 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	200 ppm	Canada. British Columbia OEL
		STEL	400 ppm	Canada. British Columbia OEL
		STEL	400 ppm 984 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	200 ppm 492 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEV	500 ppm 1,230 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)

Potassium Hydroxide

Components	CAS-No.	Value	Control parameters	Basis
caustic potash	1310-58-3	C	2 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1,

				Part 1: Permissible exposure values for airborne contaminants
Remarks	A substance which may not be recirculated in accordance with section 108. A substance to which exposure must be reduced to a minimum in accordance with section 42			
		(c)	2 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		C	2 mg/m3	Canada. British Columbia OEL
		C	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Derived No Effect Level (DNEL)

Potassium Hydroxide

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term local effects	1 mg/m3
Consumers	Inhalation	Long-term local effects	1 mg/m3

8.2 Exposure controls

Appropriate engineering controls

All reagents — Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

All reagents — Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

All reagents — Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Isopropanol — Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Potassium Hydroxide — Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Isopropanol — Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN

	14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Potassium Hydroxide	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Isopropanol	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Potassium Hydroxide	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Isopropanol

Appearance	Form: liquid Colour: colourless
Odour	Alcohol-like
Odour Threshold	No data available
pH	At 20 °C (68 °F) neutral
Melting point/freezing point	Melting point/range: -89.5 °C (-129.1 °F)
Initial boiling point and boiling range	82 °C 180 °F
Flash point	12.0 °C (53.6 °F) - closed cup
Evaporation rate	3.0
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Upper explosion limit: 13.4 %(V) Lower explosion limit: 2 %(V)
Vapour pressure	43 hPa at 20 °C (68 °F)
Vapour density	2.07
Relative density	0.785 g/mL at 25 °C (77 °F)
Water solubility	Soluble
Partition coefficient: n-octanol/water	log Pow: 0.05 - Bioaccumulation is not expected.
Auto-ignition temperature	425.0 °C (797.0 °F)

Decomposition temperature	Distillable in an undecomposed state at normal pressure.
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Potassium Hydroxide

Appearance	Form: solid Colour: colourless
Odour	Odourless
Odour Threshold	No data available
pH	ca.13.5 at 5.6 g/l at 25 °C (77 °F)
Melting point/freezing point	Melting point: 380 °C (716 °F)
Initial boiling point and boiling range	1,327 °C 2,421 °F at 1,013 hPa
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Does not ignite
Upper/lower flammability or explosive limits	No data available
Vapour pressure	1 hPa at 719 °C (1326 °F)
Vapour density	No data available
Relative density	2.04 g/cm3 at 20 °C (68 °F)
Water solubility	1,130 g/l at 20 °C (68 °F)
Partition coefficient: n-octanol/water	Not applicable for inorganic substances
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

Isopropanol

Minimum ignition energy	0.65 mJ
Conductivity	< 0.1 µS/cm
Surface tension	20.8 mN/m at 25.0 °C (77.0 °F)
Relative vapour density	2.07

Potassium Hydroxide

Bulk density	1,300 kg/m3

SECTION 10: Stability and reactivity

10.1 Reactivity

All reagents	No data available

10.2 Chemical stability

Isopropanol	Reacts with air to form peroxides. Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year. Stable under recommended storage conditions.
Potassium Hydroxide	Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Isopropanol	Vapours may form explosive mixture with air.
Potassium Hydroxide	No data available

10.4 Conditions to avoid

Isopropanol	Heat, flames and sparks.
Potassium Hydroxide	No data available

10.5 Incompatible materials

Isopropanol	Strong oxidizing agents, acid anhydrides, aluminium, halogenated compounds, acids
Potassium Hydroxide	Nitro compounds, organic materials, magnesium, copper, water. Reacts violently with: metals, light metals. Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with n formation of shock-sensitive salts. Vigorous reaction with: alkali metals, halogens, azides, anhydrides, strong oxidizing agents

10.6 Hazardous decomposition products

Isopropanol	Hazardous decomposition products formed under fire conditions: carbon oxides. Other decomposition products: no data available. In the event of fire: see section 5
Potassium Hydroxide	Hazardous decomposition products formed under fire conditions: potassium oxides. Other decomposition products: no data available. In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Isopropanol	LD50 Oral – Rat – 5,840 mg/kg (OECD Test Guideline 401) LC50 Inhalation – Rat – male and female – 4 h – 37.5 mg/l (OECD Test Guideline 403) LD50 Dermal – Rabbit – 12,800 mg/kg Remarks: (RTECS)
Potassium Hydroxide	LD50 Oral – Rat – male – 333 mg/kg (OECD Test Guideline 425) Inhalation: corrosive to respiratory system. Dermal: no data available

Skin corrosion/irritation

Isopropanol	Skin - Rabbit. Result: No skin irritation – 4 h (OECD Test Guideline 404)
Potassium Hydroxide	Skin – Rabbit. Result: Causes burns. Remarks: (IUCLID)

Serious eye damage/eye irritation

Isopropanol	Eyes - Rabbit. Result: Eye irritation (OECD Test Guideline 405) (Regulation (EC) No 1272/2008, Annex VI)
Potassium Hydroxide	Eyes – Rabbit. Result: Causes serious eye damage. (OECD Test Guideline 405) Causes serious eye damage.

Respiratory or skin sensitisation

Isopropanol	Buehler Test – Guinea pig. Result: negative (OECD Test Guideline 406)
Potassium Hydroxide	Sensitisation test: - Guinea pig. Result: negative. Remarks: (IUCLID)

Germ cell mutagenicity

Isopropanol	Ames test. Salmonella typhimurium. Result: negative. In vitro mammalian cell gene mutation test. Chinese hamster ovary cells. Result: negative. OECD Test Guideline 474. Mouse – male and female – Bone marrow. Result: negative
Potassium Hydroxide	Ames test. S. typhimurium. Result: negative (ECHA) In vitro mammalian cell gene mutation test. Mouse lymphoma cells. Result: negative

Carcinogenicity

All reagents	IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

All reagents	No data available

Specific target organ toxicity - single exposure

Isopropanol	Inhalation. Oral: may cause drowsiness or dizziness. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2). Acute inhalation toxicity: central nervous system
Potassium Hydroxide	Acute oral toxicity: if ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Acute inhalation toxicity: burns of mucous membranes, cough, shortness of breath. Possible damages: damage of respiratory tract

Specific target organ toxicity - repeated exposure

All reagents	No data available

Aspiration hazard

All reagents	No data available

Additional Information

Isopropanol	RTECS: NT8050000. Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness. Overexposure may cause mild, reversible liver effects. Aspiration may lead to: lung oedema, pneumonia. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption: headache, dizziness, inebriation, unconsciousness, narcosis. After uptake of large quantities: coma. Handle in accordance with good industrial hygiene and safety practice. Kidney: irregularities based on human evidence
Potassium Hydroxide	RTECS: Not available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Isopropanol

Toxicity to fish	Flow-through test LC50 - Pimephales promelas (fathead minnow) - 9,640 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 13,299 mg/l - 48 h Remarks: (IUCLID)
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - > 1,000 mg/l - 72H Remarks: (IUCLID)
Toxicity to bacteria	EC5 - Pseudomonas putida - 1,050 mg/l - 16 h Remarks: (Lit.)

Potassium Hydroxide

Toxicity to fish	LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h Remarks: (IUCLID)

12.2 Persistence and degradability

Isopropanol

Biodegradability	Aerobic: Exposure time 5 d. Result: 53 %. Readily biodegradable. (Directive 67/548/EEC, Annex V, C.6)
Theoretical oxygen demand	2,400 mg/g Remarks: (Lit.)
Ratio BOD/ThBOD	49 % Remarks: (IUCLID)
Potassium Hydroxide	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Isopropanol	No bioaccumulation is to be expected (log Pow <= 4).
Potassium Hydroxide	No data available

12.4 Mobility in soil

All reagents	No data available

12.5 Results of PBT and vPvB assessment

All reagents	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

Isopropanol	No data available
Potassium Hydroxide	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Isopropanol	Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.
Potassium Hydroxide	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

All reagents	Dispose of as unused product.

SECTION 14: Transport information

Isopropanol	**DOT (US)** UN number: 1219 Class: 3 Packing group: II Proper shipping name: Isopropanol Reportable Quantity (RQ): Poison Inhalation Hazard: No **IMDG** UN number: 1219 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: ISOPROPANOL **IATA** UN number: 1219 Class: 3 Packing group: II Proper shipping name: Isopropanol
Potassium Hydroxide	**DOT (US)** UN number: 1813 Class: 8 Packing group: II Proper shipping name: Potassium hydroxide, solid Reportable Quantity (RQ): 1000 lbs Poison Inhalation Hazard: No **IMDG** UN number: 1813 Class: 8 Packing group: II EMS-No: F-A, S-B Proper shipping name: POTASSIUM HYDROXIDE, SOLID **IATA** UN number: 1813 Class: 8 Packing group: II

	Proper shipping name: Potassium hydroxide, solid

SECTION 15: Regulatory Information

All reagents	This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16: Other Information

All reagents	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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