

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/10/2019

Reviewed on 06/10/2019

1 Identification

- **Product identifier**
- **Product Name:** Canadian Cannabis Residual Solvent Mix 1
- **Part Number:** CAN-CAN-RS-1
- **Application of the substance / the mixture** Certified Reference Material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SPEX CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
- **Information department:** product safety department
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

STOT SE 1 H370 Causes damage to organs.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS06



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

methanol

ethanol

- **Hazard statements**

H225 Highly flammable liquid and vapor.

H331 Toxic if inhaled.

H350 May cause cancer.

H370 Causes damage to organs.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

67-56-1	methanol	97.5%
64-17-5	ethanol	0.1%

Chemical identification of the substance/preparation

67-64-1	acetone	0.1%
100-66-3	anisole	0.1%
71-36-3	butan-1-ol	0.1%
78-92-2	butanol	0.1%
123-86-4	n-butyl acetate	0.1%
1634-04-4	Methyl-tert-butyl ether	0.1%
67-68-5	dimethyl sulfoxide	0.1%
141-78-6	ethyl acetate	0.1%
60-29-7	diethyl ether	0.1%
109-94-4	ethyl formate	0.1%
142-82-5	heptane	0.1%
110-19-0	isobutyl acetate	0.1%
108-21-4	isopropyl acetate	0.1%
79-20-9	methyl acetate	0.1%
123-51-3	Isoamyl alcohol	0.1%
78-93-3	butanone	0.1%
78-83-1	2-methylpropan-1-ol	0.1%
109-66-0	pentane	0.1%
71-41-0	Amyl alcohol	0.1%
71-23-8	propan-1-ol	0.1%
67-63-0	propan-2-ol	0.1%
109-60-4	propyl acetate	0.1%
121-44-8	triethylamine	0.1%
64-19-7	acetic acid	0.1%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.

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- In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not give anything to eat or drink - Do not induce vomiting
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

67-56-1	methanol	530 ppm
67-64-1	acetone	200 ppm
100-66-3	anisole	1.6 mg/m ³
71-36-3	butan-1-ol	60 ppm
78-92-2	butanol	150 ppm
123-86-4	n-butyl acetate	5 ppm
1634-04-4	Methyl-tert-butyl ether	50 ppm
67-68-5	dimethyl sulfoxide	150 ppm
64-17-5	ethanol	1,800 ppm
141-78-6	ethyl acetate	1,200 ppm
60-29-7	diethyl ether	500 ppm
109-94-4	ethyl formate	100 ppm
142-82-5	heptane	500 ppm
110-19-0	isobutyl acetate	450 ppm
108-21-4	isopropyl acetate	200 ppm
79-20-9	methyl acetate	250 ppm
123-51-3	Isoamyl alcohol	125 ppm
78-93-3	butanone	200 ppm
78-83-1	2-methylpropan-1-ol	150 ppm
109-66-0	pentane	3000* ppm
71-23-8	propan-1-ol	250 ppm
67-63-0	propan-2-ol	400 ppm
109-60-4	propyl acetate	250 ppm
121-44-8	triethylamine	1 ppm
64-19-7	acetic acid	5 ppm

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· PAC-2:		
67-56-1	methanol	2,100 ppm
67-64-1	acetone	3200* ppm
100-66-3	anisole	18 mg/m ³
71-36-3	butan-1-ol	800 ppm
78-92-2	butanol	220 ppm
123-86-4	n-butyl acetate	200 ppm
1634-04-4	Methyl-tert-butyl ether	570 ppm
67-68-5	dimethyl sulfoxide	290 ppm
64-17-5	ethanol	3300* ppm
141-78-6	ethyl acetate	1,700 ppm
60-29-7	diethyl ether	3200* ppm
109-94-4	ethyl formate	1,300 ppm
142-82-5	heptane	830 ppm
110-19-0	isobutyl acetate	1300* ppm
108-21-4	isopropyl acetate	2700* ppm
79-20-9	methyl acetate	1,700 ppm
123-51-3	Isoamyl alcohol	1700* ppm
78-93-3	butanone	2700* ppm
78-83-1	2-methylpropan-1-ol	1,300 ppm
109-66-0	pentane	33000*** ppm
71-23-8	propan-1-ol	670 ppm
67-63-0	propan-2-ol	2000* ppm
109-60-4	propyl acetate	1,300 ppm
121-44-8	triethylamine	170 ppm
64-19-7	acetic acid	35 ppm
· PAC-3:		
67-56-1	methanol	7200* ppm
67-64-1	acetone	5700* ppm
100-66-3	anisole	110 mg/m ³
71-36-3	butan-1-ol	8000** ppm
78-92-2	butanol	10000** ppm
123-86-4	n-butyl acetate	3000* ppm
1634-04-4	Methyl-tert-butyl ether	5300* ppm
67-68-5	dimethyl sulfoxide	1,800 ppm
64-17-5	ethanol	15000* ppm
141-78-6	ethyl acetate	10000** ppm
60-29-7	diethyl ether	19000*** ppm
109-94-4	ethyl formate	8000* ppm
142-82-5	heptane	5000* ppm
110-19-0	isobutyl acetate	7500** ppm
108-21-4	isopropyl acetate	16000** ppm
79-20-9	methyl acetate	10000* ppm
123-51-3	Isoamyl alcohol	10000** ppm
78-93-3	butanone	4000* ppm
78-83-1	2-methylpropan-1-ol	8000* ppm
109-66-0	pentane	200000*** ppm
71-23-8	propan-1-ol	4000* ppm
67-63-0	propan-2-ol	12000** ppm
109-60-4	propyl acetate	8000* ppm
121-44-8	triethylamine	1,000 ppm
64-19-7	acetic acid	250 ppm

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-56-1 methanol

PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm
	Long-term value: 260 mg/m ³ , 200 ppm
	Skin
TLV	Short-term value: 328 mg/m ³ , 250 ppm
	Long-term value: 262 mg/m ³ , 200 ppm
	Skin; BEI

64-17-5 ethanol

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm

· **Ingredients with biological limit values:**

67-56-1 methanol

BEI	15 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Methanol (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Liquid
· Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.

· **pH-value:** Not applicable.· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	64.7 °C (148.5 °F)

· **Flash point:** < 23 °C (<73.4 °F)· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 455 °C (851 °F)· **Decomposition temperature:** Not applicable.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

· Lower:	5.5 Vol %
· Upper:	44 Vol %

· **Vapor pressure at 20 °C (68 °F):** 128 hPa (96 mm Hg)· **Density at 20 °C (68 °F)** 0.79119 g/cm³ (6.60248 lbs/gal)· **Relative density** Not applicable.· **Vapor density** Not applicable.· **Evaporation rate** Not applicable.· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not applicable.· **Viscosity:**

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.

· **Solvent content:**

· Organic solvents:	99.9 %
· VOC content:	99.70 %

· **Solids content:** 0.0 %· **Other information** No further relevant information available.**10 Stability and reactivity**· **Reactivity** No further relevant information available.· **Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.· **Possibility of hazardous reactions** No dangerous reactions known.

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- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-56-1 methanol

Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

1634-04-4	Methyl-tert-butyl ether	3
64-17-5	ethanol	1
67-63-0	propan-2-ol	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1230

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· **UN proper shipping name**
· **DOT**
· **ADR**
· **IMDG, IATA**

Methanol
1230 METHANOL
METHANOL

· **Transport hazard class(es)**
· **DOT**



· **Class**
· **Label**

3 Flammable liquids
3, 6.1

· **ADR**



· **Class**
· **Label**

3 Flammable liquids
3+6.1

· **IMDG**



· **Class**
· **Label**

3 Flammable liquids
3/6.1

· **IATA**



· **Class**
· **Label**

3 Flammable liquids
3 (6.1)

· **Packing group**
· **DOT, ADR, IMDG, IATA**

II

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**
· **Danger code (Kemler):**
· **EMS Number:**
· **Stowage Category**
· **Stowage Code**

Warning: Flammable liquids
336
F-E,S-D
B
SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Excepted quantities (EQ)**

Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **IMDG**
· **Limited quantities (LQ)**
· **Excepted quantities (EQ)**

1L
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1230 METHANOL, 3 (6.1), II

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

- **Section 313 (Specific toxic chemical listings):**

67-56-1	methanol
71-36-3	butan-1-ol
78-92-2	butanol
1634-04-4	Methyl-tert-butyl ether
78-93-3	butanone
67-63-0	propan-2-ol
121-44-8	triethylamine

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

67-56-1	methanol
64-17-5	ethanol

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

67-64-1	acetone	I
71-36-3	butan-1-ol	D
142-82-5	heptane	D
78-93-3	butanone	I

- **TLV (Threshold Limit Value established by ACGIH)**

67-64-1	acetone	A4
1634-04-4	Methyl-tert-butyl ether	A3
64-17-5	ethanol	A3
71-23-8	propan-1-ol	A4
67-63-0	propan-2-ol	A4
121-44-8	triethylamine	A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



- **Signal word** Danger

- **Hazard-determining components of labeling:**

methanol
ethanol

- **Hazard statements**

H225 Highly flammable liquid and vapor.
H331 Toxic if inhaled.
H350 May cause cancer.
H370 Causes damage to organs.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.

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Do not breathe dust/fume/gas/mist/vapors/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department

· **Contact:**

SPEX CertiPrep, LLC.

1-732-549-7144

· **Date of preparation / last revision** 06/10/2019 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Carc. 1A: Carcinogenicity – Category 1A

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

US