

Revision date 08/24/2024

#### 1 Identification

· Product identifier

· Product Name: Cannabis Residual Solvents Standard (1X1 mL)

· Part number: RSC-100-1

· Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:
 Agilent Technologies, Inc.
 5301 Stevens Creek Blvd.
 Santa Clara, CA 95051 USA

· Information department:

Telephone: 800-227-9770

e-mail: pdl-msds author@agilent.com

· Emergency telephone number: CHEMTREC®: 1-800-424-9300

#### 2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*1 Fire = 1

REACTIVITY 0 Reactivity = 0

- · 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: Void

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#### 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: 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).

· 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:		
102-76-1	(tri-)Acetin	19 mg/m <sup>3</sup>
60-29-7	diethyl ether	500 ppm
64-17-5	ethanol	1,800 ppm
67-56-1	methanol	530 ppm
67-63-0	propan-2-ol	400 ppm
67-64-1	acetone	200 ppm
67-68-5	dimethyl sulfoxide	150 ppm
68-12-2	N,N-Dimethylformamide	2 ppm
71-23-8	propan-1-ol	250 ppm
71-36-3	butan-1-ol	60 ppm
71-43-2	benzene	52 ppm
74-98-6	propane	5500* ppm
75-05-8	acetonitrile	13 ppm

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75-09-2	dichloromethane	200 ppm
75-28-5	isobutane	5500* p
75-83-2	2,2-dimethylbutane	1,000 pp
78-78-4	isopentane	3000* p
78-92-2	butanol	150 ppm
78-93-3	butanone	200 ppm
96-14-0	3-methylpentane	1,000 pp
98-82-8	Cumene	50 ppm
100-41-4	ethylbenzene	33 ppm
106-97-8	butane	5500* p
107-21-1	ethanediol	30 ppm
107-83-5	2-methylpentane	1,000 pp
108-21-4	isopropyl acetate	200 ppm
108-38-3	m-xylene	130 ppm
108-88-3	toluene	67 ppm
109-66-0	pentane	3000* p
109-99-9	tetrahydrofuran	100 ppm
· PAC-2:		
	(tri-)Acetin	210 mg/m <sup>3</sup>
	diethyl ether	3200* ppm
	ethanol	3300* ppm
67-56-1	methanol	2,100 ppm
67-63-0	propan-2-ol	2000* ppm
	acetone	3200* ppm
67-68-5	dimethyl sulfoxide	290 ppm
	N,N-Dimethylformamide	91 ppm
	propan-1-ol	670 ppm
	butan-1-ol	800 ppm
71-43-2	benzene	800 ppm
74-98-6	propane	17000** pp
	acetonitrile	50 ppm
75-09-2	dichloromethane	560 ppm
75-28-5	isobutane	17000** pp:
75-83-2	2,2-dimethylbutane	11000** pp:
	isopentane	33000*** p
	butanol	220 ppm
78-93-3	butanone	2700* ppm
	3-methylpentane	11000** pp:
	Cumene	300 ppm
	ethylbenzene	1100* ppm
	butane	17000** pp:



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107.21.1		(Contd. of pag
	ethanediol	150 ppm
	2-methylpentane	11000** ppn
	isopropyl acetate	2700* ppm
108-38-3	•	920 ppm
108-88-3		560 ppm
109-66-0	<u>-</u>	33000*** pp
109-99-9	tetrahydrofuran	500 ppm
· PAC-3:		
102-76-1	(tri-)Acetin	1,200 mg/m³
60-29-7	diethyl ether	19000*** pp
64-17-5	ethanol	15000* ppm
67-56-1	methanol	7200* ppm
67-63-0	propan-2-ol	12000** ppn
67-64-1	acetone	5700* ppm
67-68-5	dimethyl sulfoxide	1,800 ppm
68-12-2	N,N-Dimethylformamide	530 ppm
71-23-8	propan-1-ol	4000* ppm
71-36-3	butan-1-ol	8000** ppm
71-43-2	benzene	4000* ppm
74-98-6	propane	33000*** pp
75-05-8	acetonitrile	150 ppm
75-09-2	dichloromethane	6,900 ppm
75-28-5	isobutane	53000*** pp
75-83-2	2,2-dimethylbutane	66000*** pp
78-78-4	isopentane	200000 ppm
78-92-2	butanol	10000** ppn
78-93-3	butanone	4000* ppm
96-14-0	3-methylpentane	66000*** pp
98-82-8	Cumene	730 ppm
100-41-4	ethylbenzene	1800* ppm
106-97-8	butane	53000*** pp
107-21-1	ethanediol	900 ppm
107-83-5	2-methylpentane	66000*** pp
108-21-4	isopropyl acetate	16000** ppn
108-38-3	m-xylene	2500* ppm
108-88-3	toluene	3700* ppm
109-66-0	pentane	200000 ppm
109-99-9	tetrahydrofuran	5000* ppm



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#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · 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 section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

Protection of hands:

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· Material of gloves

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: >4 hours

· Eye protection: Goggles recommended during refilling.

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9 Physical and chemical propert	ties
· Information on basic physical and cl	hemical properties
· General Information	
· Appearance:	
Form:	Fluid
Color:	Colorless
· Odor: · Odor threshold:	Characteristic Not determined.
· pH-value:	Not determined.
•	1 (of determined)
· Change in condition  Melting point/Melting range:	-52 °C (-61.6 °F)
Boiling point/Boiling range:	266 °C (510.8 °F)
· Flash point:	148 °C (298.4 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto igniting:	410 °C (770 °F)
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	<0.01 hPa (<0 mm Hg)
· Density at 20 °C (68 °F):	1.14483 g/cm³ (9.55361 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	27
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	r): Not determined.
· Viscosity:	No. 1 and 1
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	200/
Organic solvents:	2.9 %
VOC content:	2.85 % 32.6 g/l / 0.27 lb/gal
Solids content:	0.0 %
· Other information	No further relevant information available.
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#### 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.
- · 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:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (Ir	nternational Agency for Research on Cancer)	
64-17-5	ethanol	1
67-63-0	propan-2-ol	3
68-12-2	N,N-Dimethylformamide	2A
71-43-2	benzene	1
75-09-2	dichloromethane	2A
95-47-6	o-xylene	3
98-82-8	Cumene	2B
100-41-4	ethylbenzene	2B
106-42-3	p-xylene	3
108-38-3	m-xylene	3
108-88-3	toluene	3
109-99-9	tetrahydrofuran	2B
110-86-1	pyridine	2B
123-91-1	1,4-dioxane	2B
127-19-5	N,N-dimethylacetamide	2B
· NTP (Na	tional Toxicology Program)	
71-43-2	benzene	K
75-09-2	dichloromethane	R
98-82-8	Cumene	R
123-91-1	1,4-dioxane	R



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71-43-2 benzene

75-09-2 dichloromethane

#### 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 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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:** Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

#### 14 Transport information

· Not Regulated, De minimis Quantities	-
· UN-Number · DOT, ADN, IMDG, IATA	not regulated
· UN proper shipping name · DOT, ADN, IMDG, IATA	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· DOT, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.

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· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation": not regulated

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 3	55 (extremely hazardous substances):
	he ingredients is listed.
· Section 3	13 (Specific toxic chemical listings):
67-56-1	methanol
67-63-0	propan-2-ol
68-12-2	N,N-Dimethylformamide
71-36-3	butan-1-ol
71-43-2	benzene
75-05-8	acetonitrile
	dichloromethane
78-92-2	butanol
95-47-6	o-xylene
98-82-8	Cumene
100-41-4	ethylbenzene
106-42-3	p-xylene
107-21-1	ethanediol
108-38-3	m-xylene
108-88-3	toluene
110-54-3	
110-71-4	1,2-dimethoxyethane
110-80-5	2-ethoxyethanol
110-82-7	cyclohexane
110-86-1	
123-91-1	1,4-dioxane
· TSCA (T	oxic Substances Control Act):

All components have the value ACTIVE.

#### · Hazardous Air Pollutants

67-56-1 methanol

68-12-2 N,N-Dimethylformamide

71-43-2 benzene

75-05-8 acetonitrile

75-09-2 dichloromethane

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95-47-6	o-xylene	T U
98-82-8	Cumene	
100-41-4	ethylbenzene	
106-42-3	p-xylene	
107-21-1	ethanediol	
108-38-3	m-xylene	
108-88-3	toluene	
110-54-3	n-hexane	
123-91-1	1,4-dioxane	
· Propositi	on 65	
· Chemica	s known to cause cancer:	
68-12-2	N,N-Dimethylformamide	
71-43-2	benzene	
75-09-2	dichloromethane	
98-82-8	Cumene	
100-41-4	ethylbenzene	
	tetrahydrofuran	
110-86-1		
123-91-1	1,4-dioxane	
127-19-5	N,N-dimethylacetamide	
· Chemica	s known to cause reproductive toxicity for females:	
None of t	he ingredients is listed.	
· Chemica	s known to cause reproductive toxicity for males:	
	benzene	
110-54-3	n-hexane	
110-80-5	2-ethoxyethanol	
	N,N-dimethylacetamide	
· Chemica	ls known to cause developmental toxicity:	
64-17-5		
67-56-1	methanol	
71-43-2	benzene	
107-21-1	ethanediol	
108-88-3		
	2-ethoxyethanol	
	N,N-dimethylacetamide	
	enic categories	
_	vironmental Protection Agency)	
67-64-1	8 17	Ţ
	butan-1-ol	D
	benzene	A, K/L
	acetonitrile	CBD, D
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		d. of page
	dichloromethane	L
	butanone	I
	o-xylene	I
	Cumene	D, CB
	ethylbenzene	D
	p-xylene	I
	m-xylene	I
108-88-3		II
	tetrahydrofuran	SC
	n-hexane	II
	cyclohexane	I
	1,4-dioxane	L
142-82-5	heptane	D
	reshold Limit Value)	
	ethanol	Α
	propan-2-ol	Α
	acetone	Α
	N,N-Dimethylformamide	Α
	propan-1-ol	Α
	benzene	Α
	acetonitrile	Α
	dichloromethane	Α
95-47-6	o-xylene	Α
100-41-4	ethylbenzene	Α
	p-xylene	Α
107-21-1	ethanediol	Α
	m-xylene	A
108-88-3		Α
	tetrahydrofuran	Α
110-86-1	pyridine	Α
123-91-1	1,4-dioxane	Α
127-19-5	N,N-dimethylacetamide	Α
	Ca (National Institute for Occupational Safety and Health)	
	benzene	
	dichloromethane	
123-91-1	1,4-dioxane	

### 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

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· Contact:

· Date of preparation / last revision 08/24/2024 / 3

Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

\* \* Data compared to the previous version altered.

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