1 Identification

- · Product identifier
- · Product Name: Canadian Pesticide Mix 4A
- · Part Name: CAN-CAN-4A
- $\cdot \textbf{\textit{Application of the substance / the mixture } \textit{Certified Reference Material} \\$
- · 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.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS02

- $\cdot \textbf{\textit{Signal word }} \textit{Danger}$
- · Hazard-determining components of labeling:

acetonitrile

· Hazard statements

H225 Highly flammable liquid and vapor. H312+H332 Harmful in contact with skin or if inhaled.

H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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



Health = 2 Fire = 3Reactivity = 0

(Contd. on page 2)

Product Name: Canadian Pesticide Mix 4A

· HMIS-ratings (scale 0 - 4)

(Contd. of page 1)



- · 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 co	omponents:	
75-05-8 acet	onitrile	99.931%
· Chemical ide	ntification of the substance/preparation	
62-73-7	dichlorvos (ISO)	0.01%
118134-30-8		0.01%
298-00-0	parathion -methyl (ISO)	0.005%
	mevinphos (ISO)	0.005%
23564-05-8	dimethylcarbamoyl chloride	0.005%
80844-07-1	Etofenprox	0.005%
2921-88-2	chlorpyrifos (ISO)	0.004%
2593-15-9	5-ethoxy-3-trichloromethyl-1,2,4-thiadiazole	0.003%
55-38-9	fenthion (ISO)	0.002%
	coumaphos (ISO)	0.002%
60-51-5	dimethoate (ISO)	0.002%
115-90-2	fensulfothion (ISO)	0.002%
121-75-5	malathion (ISO)	0.002%
333-41-5	diazinon (ISO)	0.002%
732-11-6	phosmet (ISO)	0.002%
13194-48-4	ethoprophos (ISO)	0.002%
	tetrachlorvinphos	0.002%
30560-19-1	acephate (ISO)	0.002%
153233-91-1	etoxazol	0.002%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · 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 No further relevant information available.

(Contd. on page 3)

Safety Data Sheet acc. to OSHA HCS

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Product Name: Canadian Pesticide Mix 4A

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- $\cdot \textit{Advice for firefighters}$
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures 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

75-05-8	acetonitrile	13 ppm
62-73-7	dichlorvos (ISO)	1.8 mg/m^3
298-00-0	parathion -methyl (ISO)	0.11 mg/m
7786-34-7	mevinphos (ISO)	0.3 mg/m^3
2921-88-2	chlorpyrifos (ISO)	0.6 mg/m^3
55-38-9	fenthion (ISO)	0.15 mg/m
56-72-4	coumaphos (ISO)	0.27 mg/m
60-51-5	dimethoate (ISO)	2.7 mg/m^3
115-90-2	fensulfothion (ISO)	0.18 mg/m
121-75-5	malathion (ISO)	15 mg/m³
732-11-6	phosmet (ISO)	0.049 mg/s
13194-48-4	ethoprophos (ISO)	0.14 mg/m
PAC-2:		
75-05-8	acetonitrile	50 ppm
62-73-7	dichlorvos (ISO)	20 mg/m
298-00-0	parathion -methyl (ISO)	1.2 mg/m
7786-34-7	mevinphos (ISO)	4 mg/m ³
2921-88-2	chlorpyrifos (ISO)	15 mg/m
55-38-9	fenthion (ISO)	5.9 mg/n
56-72-4	coumaphos (ISO)	3 mg/m^3
60-51-5	dimethoate (ISO)	30 mg/m
115-90-2	fensulfothion (ISO)	2 mg/m ³
121-75-5	malathion (ISO)	120 mg/1
732-11-6	phosmet (ISO)	0.54 mg/
13194-48-4	ethoprophos (ISO)	1.6 mg/m
PAC-3:		<u>'</u>
75-05-8	acetonitrile	150 ppm
62-73-7	dichlorvos (ISO)	200 mg/s
298-00-0	parathion -methyl (ISO)	3.5 mg/1
7786-34-7	mevinphos (ISO)	40 mg/n
2921-88-2	chlorpyrifos (ISO)	44 mg/n
55-38-9	fenthion (ISO)	35 mg/n
56-72-4	coumaphos (ISO)	13 mg/m
60-51-5	dimethoate (ISO)	170 mg/s
115-90-2	fensulfothion (ISO)	3.1 mg/r.
121-75-5	malathion (ISO)	390 mg/s
732-11-6	phosmet (ISO)	77 mg/n

Product Name: Canadian Pesticide Mix 4A

(Contd. of page 3)

13194-48-4 ethoprophos (ISO)

9.3 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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:

75-05-8 acetonitrile

PEL Long-term value: 70 mg/m³, 40 ppm REL Long-term value: 34 mg/m³, 20 ppm

TLV Long-term value: 34 mg/m³, 20 ppm Skin

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

 ${\it Keep \ away \ from \ foodstuffs, \ beverages \ and \ feed.}$

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· 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

· 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.

(Contd. on page 5)

Product Name: Canadian Pesticide Mix 4A

· Eye protection:

(Contd. of page 4)



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

· pH-value:

Form: Liquid

Color: According to product specification

Not applicable.

Odor: Characteristic
 Odour Threshold: Not applicable.

· Change in condition

Melting point/Melting range:Undetermined.Boiling point/Boiling range:81 °C (177.8 81 °F)

• Flash point: $< 23 \, ^{\circ}C \, (73.4 < 23 \, ^{\circ}F)$

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 525 °C (977 525 °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: 4.4 Vol %

 Upper: 16 Vol %

• Vapor pressure at 20 °C (6820 °F): 97 hPa (72.8 97 mm Hg)

Density Not applicable.
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:
 0.0 %

 VOC content:
 0.02 %

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

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity.

· Acute to	систу:
· LD/LC5	0 values that are relevant for classification:
75-05-8	acetonitrile
Oral	LD50 2,730 mg/kg (rat)
Dermal	LD50 1,250 mg/kg (rabbit)
298-00-	parathion -methyl (ISO)
Oral	LD50 6 mg/kg (rat)
Dermal	LD50 67 mg/kg (rat)
	7 mevinphos (ISO)
Oral	LD50 4 mg/kg (rat)
Dermal	LD50 4 mg/kg (rat)
2921-88	2 chlorpyrifos (ISO)
Oral	LD50 135 mg/kg (rat)
Dermal	LD50 202 mg/kg (rat)
121-75	malathion (ISO)
Oral	LD50 885 mg/kg (rat)
732-11-	phosmet (ISO)
Oral	LD50 230 mg/kg (rat)

- · Primary irritant effect:
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Dermal | LD50 | 1,150 mg/kg (rat)

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· Carcinogenic categories

· IARC (Inter	rnational Agency for Research on Cancer)	
62-73-7	dichlorvos (ISO)	28
298-00-0	parathion -methyl (ISO)	3
121-75-5	malathion (ISO)	2A
333-41-5	diazinon (ISO)	2A
22248-79-9	tetrachlorvinphos	2 <i>B</i>
· NTP (Nation	onal 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.
- $\cdot \textit{Persistence and degradability} \ \textit{No further relevant information available}.$
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely 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.

Product Name: Canadian Pesticide Mix 4A

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13 Disposal considerations

- $\cdot \ Waste \ treatment \ methods$
- 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	UN1648
· UN proper shipping name · DOT · ADR · IMDG, IATA	Acetonitrile 1648 ACETONITRILE, ENVIRONMENTALLY HAZARDOUS ACETONITRILE
· Transport hazard class(es)	
· DOT	
· Class · Label	3 Flammable liquids 3
ADR	
· Class · Label	3 Flammable liquids 3
· IMDG, IATA · Class · Label	3 Flammable liquids 3
Packing group DOT, ADR, IMDG, IATA	II
Environmental hazards: Special marking (ADR):	Symbol (fish and tree)
 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category Stowage Code 	Warning: Flammable liquids 33 F-E,S-D B SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MAR Code	PPOL73/78 and the IBC 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

Product Name: Canadian Pesticide Mix 4A

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

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

· UN "Model Regulation":
UN 1648 ACETONITRILE, 3, II, ENVIRONMENTALLY HAZARDOUS

gulatory information Tety, health and environmental regulations/legislation specific for the substance or mixture attion 313 (Specific toxic chemical listings): 75-05-8 acetonitrile 62-73-7 dichlorvos (ISO) 898-00-0 parathion -methyl (ISO) 898-00-0 parathion -methyl (ISO) 898-04-7 mevinphos (ISO) 898-34-7 mevinphos (ISO) 898-34-7 fenthion (ISO) 898-34-7 dimethylcarbamoyl chloride 855-38-9 fenthion (ISO) 809-51-5 dimethoate (ISO) 813-41-5 diazinon (ISO) 813-41-5 diazinon (ISO) 814-48-4 ethoprophos (ISO) 815-19-1 acephate (ISO)	
tion 313 (Specific toxic chemical listings): 75-05-8 acetonitrile 62-73-7 dichlorvos (ISO) 898-00-0 parathion -methyl (ISO) 886-34-7 mevinphos (ISO) 664-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO) 621-75-5 malathion (ISO) 633-41-5 diazinon (ISO) 694-48-4 ethoprophos (ISO)	
75-05-8 acetonitrile 62-73-7 dichlorvos (ISO) 698-00-0 parathion -methyl (ISO) 664-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 604-51-5 dimethoate (ISO) 633-41-5 diazinon (ISO) 694-48-4 ethoprophos (ISO)	
62-73-7 dichlorvos (ISO) 898-00-0 parathion -methyl (ISO) 808-34-7 mevinphos (ISO) 864-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO) 821-75-5 malathion (ISO) 833-41-5 diazinon (ISO) 94-48-4 ethoprophos (ISO)	
298-00-0 parathion -methyl (ISO) 286-34-7 mevinphos (ISO) 564-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO) 221-75-5 malathion (ISO) 133-41-5 diazinon (ISO) 194-48-4 ethoprophos (ISO)	
786-34-7 mevinphos (ISO) 664-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO) 721-75-5 malathion (ISO) 733-41-5 diazinon (ISO) 794-48-4 ethoprophos (ISO)	
564-05-8 dimethylcarbamoyl chloride 55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO) 21-75-5 malathion (ISO) 33-41-5 diazinon (ISO) 194-48-4 ethoprophos (ISO)	
55-38-9 fenthion (ISO) 60-51-5 dimethoate (ISO)	
60-51-5 dimethoate (ISO) (21-75-5 malathion (ISO) (33-41-5 diazinon (ISO) (94-48-4 ethoprophos (ISO)	
21-75-5 malathion (ISO)	
33-41-5 diazinon (ISO)	
94-48-4 ethoprophos (ISO)	
60-19-1 acephate (ISO)	
CA (Toxic Substances Control Act):	
i-05-8 acetonitrile	ACTI
2-73-7 dichlorvos (ISO)	ACTI
0-51-5 dimethoate (ISO)	ACTI
3-41-5 diazinon (ISO)	ACTI
zardous Air Pollutants	
05-8 acetonitrile	
73-7 dichlorvos (ISO)	
position 65	
emicals known to cause cancer:	
62-73-7 dichlorvos (ISO)	
593-15-9 5-ethoxy-3-trichloromethyl-1,2,4-thiadiazole	
21-75-5 malathion (ISO)	
94-48-4 ethoprophos (ISO)	
248-79-9 tetrachlorvinphos	
emicals known to cause reproductive toxicity for females:	
64-05-8 dimethylcarbamoyl chloride	
emicals known to cause reproductive toxicity for males:	
64-05-8 dimethylcarbamoyl chloride	
emicals known to cause developmental toxicity:	
2.1-88-2 chlorpyrifos (ISO)	
rcinogenic categories	
A (Environmental Protection Agency)	
05-8 acetonitrile	CBD
73-7 dichlorvos (ISO)	B2
V (Threshold Limit Value established by ACGIH)	B2
V (11resnota Limit Value establishea by ACGIH) 75-05-8 acetonitrile	
5-03-0 decelorative (2-73-7 dichlorvos (ISO)	
28-00-0 parathion -methyl (ISO)	
86-34-7 mevinphos (ISO)	
21-88-2 chlorpyrifos (ISO)	
55-38-9 fenthion (ISO)	

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(Contd. of page 8) 56-72-4 coumaphos (ISO) A4115-90-2 fensulfothion (ISO) A4121-75-5 malathion (ISO) A4333-41-5 diazinon (ISO) 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



GHS02



- · Signal word Danger
- · Hazard-determining components of labeling:

acetonitrile

· Hazard statements

H225 Highly flammable liquid and vapor. H312+H332 Harmful in contact with skin or if inhaled.

H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

· 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 09/28/2019 / -
- · 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

Flam. Liq. 2: Flammable liquids - Category 2

Acute Tox. 4: Acute toxicity - Category

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A