

# SAFETY DATA SHEET

RapidFire SAT Plate, Part Number G9203-60002

## Section 1. Identification

**Product identifier** : RapidFire SAT Plate, Part Number G9203-60002

**Part no. (chemical kit)** : G9203-60002

**Part no.** : Sample 1 Not available.  
Sample 2 Not available.  
Sample 3 Not available.  
Sample 4 Not available.

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

**Identified uses** :  Analytical chemistry.

<input checked="" type="checkbox"/> Sample 1	1.75 ml
Sample 2	1.75 ml
Sample 3	1.75 ml
Sample 4	1.75 ml

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
5301 Stevens Creek Blvd  
Santa Clara, CA 95051, USA  
800-227-9770

**Emergency telephone number (with hours of operation)** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

### Classification of the substance or mixture

#### Sample 1

H225 FLAMMABLE LIQUIDS - Category 2  
H302 ACUTE TOXICITY (oral) - Category 4  
H312 ACUTE TOXICITY (dermal) - Category 4  
H332 ACUTE TOXICITY (inhalation) - Category 4  
H319 EYE IRRITATION - Category 2A  
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### Sample 2

H225 FLAMMABLE LIQUIDS - Category 2  
H302 ACUTE TOXICITY (oral) - Category 4  
H312 ACUTE TOXICITY (dermal) - Category 4  
H332 ACUTE TOXICITY (inhalation) - Category 4  
H319 EYE IRRITATION - Category 2A  
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### Sample 3

H225 FLAMMABLE LIQUIDS - Category 2  
H302 ACUTE TOXICITY (oral) - Category 4  
H312 ACUTE TOXICITY (dermal) - Category 4  
H332 ACUTE TOXICITY (inhalation) - Category 4  
H319 EYE IRRITATION - Category 2A  
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### Sample 4

H225 FLAMMABLE LIQUIDS - Category 2  
H302 ACUTE TOXICITY (oral) - Category 4

## Section 2. Hazard identification

H312	ACUTE TOXICITY (dermal) - Category 4
H332	ACUTE TOXICITY (inhalation) - Category 4
H319	EYE IRRITATION - Category 2A
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### GHS label elements

#### Hazard pictograms

:  Sample 1



Sample 2



Sample 3



Sample 4



#### Signal word

:  Sample 1

Danger

Sample 2

Danger

Sample 3

Danger

Sample 4

Danger

#### Hazard statements

:  Sample 1

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure.

Sample 2

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure.

Sample 3

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure.

Sample 4

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

## Section 2. Hazard identification

<b>Prevention</b>	: Sample 1	<p>P280 - Wear protective gloves and protective clothing. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 - Do not breathe vapor.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p>
	Sample 2	<p>P264 - Wash thoroughly after handling.</p> <p>P280 - Wear protective gloves and protective clothing. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 - Do not breathe vapor.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p>
	Sample 3	<p>P264 - Wash thoroughly after handling.</p> <p>P280 - Wear protective gloves and protective clothing. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 - Do not breathe vapor.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p>
	Sample 4	<p>P264 - Wash thoroughly after handling.</p> <p>P280 - Wear protective gloves and protective clothing. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 - Do not breathe vapor.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p>
<b>Response</b>	: Sample 1	<p>P264 - Wash thoroughly after handling.</p> <p>P314 - Get medical advice or attention if you feel unwell.</p> <p>P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical advice or attention.</p>
	Sample 2	<p>P314 - Get medical advice or attention if you feel unwell.</p> <p>P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical advice or attention.</p>
	Sample 3	<p>P314 - Get medical advice or attention if you feel unwell.</p> <p>P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.</p> <p>P302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell.</p>

## Section 2. Hazard identification

	Sample 4	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 or attention. P314 - Get medical advice or attention if you feel unwell. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P302 + P312 - IF ON SKIN: Call a POISON CENTER or 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 or attention.
<b>Storage</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: <input checked="" type="checkbox"/> Sample 1  Sample 2  Sample 3  Sample 4	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	None known. None known. None known. None known.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	None known. None known. None known. None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Sample 1	Mixture
	Sample 2	Mixture
	Sample 3	Mixture
	Sample 4	Mixture

Ingredient name	Synonyms	% (w/w)	CAS number
<input checked="" type="checkbox"/> <b>Sample 1</b> Acetonitrile	Acetonitrile	≥80	75-05-8
<b>Sample 2</b> Acetonitrile	Acetonitrile	≥80	75-05-8
<b>Sample 3</b>			

## Section 3. Composition/information on ingredients

Acetonitrile	Acetonitrile	≥80	75-05-8
<b>Sample 4</b>			
Acetonitrile	Acetonitrile	≥80	75-05-8

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

#### Eye contact

: Sample 1

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Sample 2

Sample 3

Sample 4

#### Inhalation

: Sample 1

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Sample 2

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-

## Section 4. First-aid measures

Sample 3

to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Sample 4

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**

: Sample 1

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Sample 2

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a

## Section 4. First-aid measures

	Sample 3	poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Sample 4	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: Sample 1	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Sample 2	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Sample 3	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First-aid measures

Sample 4

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	Harmful if inhaled. Harmful if inhaled. Harmful if inhaled. Harmful if inhaled.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	Harmful in contact with skin. Harmful in contact with skin. Harmful in contact with skin. Harmful in contact with skin.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	Harmful if swallowed. Harmful if swallowed. Harmful if swallowed. Harmful if swallowed.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Sample 1  Sample 2  Sample 3  Sample 4	Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	No specific data. No specific data. No specific data. No specific data.

## Section 4. First-aid measures

<b>Skin contact</b>	: <input checked="" type="checkbox"/> Sample 1	No specific data.
	Sample 2	No specific data.
	Sample 3	No specific data.
	Sample 4	No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Sample 1	No specific data.
	Sample 2	No specific data.
	Sample 3	No specific data.
	Sample 4	No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> Sample 1	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Sample 2	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Sample 3	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Sample 4	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: <input checked="" type="checkbox"/> Sample 1	No specific treatment.
	Sample 2	No specific treatment.
	Sample 3	No specific treatment.
	Sample 4	No specific treatment.
<b>Protection of first-aiders</b>	: <input checked="" type="checkbox"/> Sample 1	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Sample 2	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Sample 3	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Sample 4	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person

## Section 4. First-aid measures


providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.


See toxicological information (Section 11)


## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** :  Sample 1 Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.  
Sample 2 Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.  
Sample 3 Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.  
Sample 4 Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** :  Sample 1 Do not use water jet.  
Sample 2 Do not use water jet.  
Sample 3 Do not use water jet.  
Sample 4 Do not use water jet.

**Specific hazards arising from the chemical** :  Sample 1 Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.  
Sample 2 Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.  
Sample 3 Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.  
Sample 4 Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Hazardous thermal decomposition products** :  Sample 1 Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides  
Sample 2 Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides  
Sample 3 Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides  
Sample 4 Decomposition products may include the following materials:

## Section 5. Fire-fighting measures

carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides

**Special protective actions for fire-fighters** : Sample 1

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Sample 2

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Sample 3

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Sample 4

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Sample 1

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Sample 2

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Sample 3

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Sample 4

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Sample 1

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

## Section 6. Accidental release measures

Sample 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Sample 3	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Sample 4	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

### For emergency responders : Sample 1

Sample 1	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Sample 2	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Sample 3	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Sample 4	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### Environmental precautions : Sample 1

Sample 1	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Sample 2	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Sample 3	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

## Section 6. Accidental release measures

Sample 4

caused environmental pollution (sewers, waterways, soil or air).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Methods for cleaning up** : Sample 1

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Sample 2

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Sample 3

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Sample 4

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Sample 1

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Sample 2

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do

## Section 7. Handling and storage

not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Sample 3

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Sample 4

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Advice on general occupational hygiene

: Sample 1

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Sample 2

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

Sample 3	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Sample 4	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
<b>Conditions for safe storage, including any incompatibilities</b> : Sample 1	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Sample 2	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Sample 3	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Sample 4	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from

## Section 7. Handling and storage

oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### [Control parameters](#)

### [Occupational exposure limits](#)

Ingredient name	Exposure limits
<b>Sample 1</b> Acetonitrile	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 34 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 20 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 6/2022). Absorbed through skin.</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 6/2022). Absorbed through skin.</b> TWAEV: 20 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.</b> STEL: 30 ppm 15 minutes. TWA: 20 ppm 8 hours.</p>
<b>Sample 2</b> Acetonitrile	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 34 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 20 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 6/2022). Absorbed through skin.</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 6/2022). Absorbed through skin.</b> TWAEV: 20 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.</b> STEL: 30 ppm 15 minutes. TWA: 20 ppm 8 hours.</p>
<b>Sample 3</b> Acetonitrile	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 34 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 20 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 6/2022). Absorbed through skin.</b> TWA: 20 ppm 8 hours.</p>

## Section 8. Exposure controls/personal protection

**Sample 4**  
Acetonitrile

**CA Ontario Provincial (Canada, 6/2019).  
Absorbed through skin.**

TWA: 20 ppm 8 hours.

**CA Quebec Provincial (Canada, 6/2022).  
Absorbed through skin.**

TWAEV: 20 ppm 8 hours.

**CA Saskatchewan Provincial (Canada,  
7/2013). Absorbed through skin.**

STEL: 30 ppm 15 minutes.

TWA: 20 ppm 8 hours.

**CA Alberta Provincial (Canada, 6/2018).**

8 hrs OEL: 34 mg/m<sup>3</sup> 8 hours.

8 hrs OEL: 20 ppm 8 hours.

**CA British Columbia Provincial (Canada,  
6/2022). Absorbed through skin.**

TWA: 20 ppm 8 hours.

**CA Ontario Provincial (Canada, 6/2019).  
Absorbed through skin.**

TWA: 20 ppm 8 hours.

**CA Quebec Provincial (Canada, 6/2022).  
Absorbed through skin.**

TWAEV: 20 ppm 8 hours.

**CA Saskatchewan Provincial (Canada,  
7/2013). Absorbed through skin.**

STEL: 30 ppm 15 minutes.

TWA: 20 ppm 8 hours.

### Biological exposure indices

No exposure indices known.

### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

## Section 8. Exposure controls/personal protection

- Hand protection** :  Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** :  Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** :  Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** :  Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	: Sample 1	Liquid.
	Sample 2	Liquid.
	Sample 3	Liquid.
	Sample 4	Liquid.
<b>Color</b>	: Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.
<b>Odor</b>	: Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.
<b>Odor threshold</b>	: Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.
<b>pH</b>	: Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.
<b>Melting point/freezing point</b>	: Sample 1	-46°C (-50.8°F)
	Sample 2	-46°C (-50.8°F)
	Sample 3	-46°C (-50.8°F)
	Sample 4	-46°C (-50.8°F)
<b>Boiling point, initial boiling point, and boiling range</b>	: Sample 1	82°C (179.6°F)
	Sample 2	82°C (179.6°F)
	Sample 3	82°C (179.6°F)
	Sample 4	82°C (179.6°F)

## Section 9. Physical and chemical properties and safety characteristics

**Flash point** : Sample 1 Closed cup: 12.8°C (55°F)  
 Sample 2 Closed cup: 12.8°C (55°F)  
 Sample 3 Closed cup: 12.8°C (55°F)  
 Sample 4 Closed cup: 12.8°C (55°F)

**Evaporation rate** : Sample 1 Not available.  
 Sample 2 Not available.  
 Sample 3 Not available.  
 Sample 4 Not available.

**Flammability** : Sample 1 Not applicable.  
 Sample 2 Not applicable.  
 Sample 3 Not applicable.  
 Sample 4 Not applicable.

**Lower and upper explosion limit/flammability limit** : Sample 1 Lower: 3%  
 Upper: 16%  
 Sample 2 Lower: 3%  
 Upper: 16%  
 Sample 3 Lower: 3%  
 Upper: 16%  
 Sample 4 Lower: 3%  
 Upper: 16%

**Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>Sample 1</b>						
Acetonitrile	70.89	9.5	-	-	-	-
<b>Sample 2</b>						
Acetonitrile	70.89	9.5	-	-	-	-
<b>Sample 3</b>						
Acetonitrile	70.89	9.5	-	-	-	-
<b>Sample 4</b>						
Acetonitrile	70.89	9.5	-	-	-	-

**Relative vapor density** : Sample 1 Not available.  
 Sample 2 Not available.  
 Sample 3 Not available.  
 Sample 4 Not available.

**Relative density** : Sample 1 Not available.  
 Sample 2 Not available.  
 Sample 3 Not available.  
 Sample 4 Not available.

## Section 9. Physical and chemical properties and safety characteristics

<b>Solubility(ies)</b>	<b>Media</b>	<b>Result</b>
	<input checked="" type="checkbox"/> <b>Sample 1</b> water	Soluble
	<b>Sample 2</b> water	Soluble
	<b>Sample 3</b> water	Soluble
	<b>Sample 4</b> water	Soluble

<b>Partition coefficient: n-octanol/water</b>		
	<input checked="" type="checkbox"/> Sample 1	Not applicable.
	Sample 2	Not applicable.
	Sample 3	Not applicable.
	Sample 4	Not applicable.

<b>Auto-ignition temperature</b>	<b>Ingredient name</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>
	<input checked="" type="checkbox"/> <b>Sample 1</b> Acetonitrile	524	975.2	-
	<b>Sample 2</b> Acetonitrile	524	975.2	-
	<b>Sample 3</b> Acetonitrile	524	975.2	-
	<b>Sample 4</b> Acetonitrile	524	975.2	-

<b>Decomposition temperature</b>		
	Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.

<b>Viscosity</b>		
	Sample 1	Not available.
	Sample 2	Not available.
	Sample 3	Not available.
	Sample 4	Not available.






### Particle characteristics

<b>Median particle size</b>		
	<input checked="" type="checkbox"/> Sample 1	Not applicable.
	Sample 2	Not applicable.
	Sample 3	Not applicable.
	Sample 4	Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>		
	<input checked="" type="checkbox"/> Sample 1	No specific test data related to reactivity available for this product or its ingredients.
	Sample 2	No specific test data related to reactivity available for this product or its ingredients.
	Sample 3	No specific test data related to reactivity available for this product or its ingredients.
	Sample 4	No specific test data related to reactivity available for this product or its ingredients.

## Section 10. Stability and reactivity

<b>Chemical stability</b>	:  Sample 1 Sample 2 Sample 3 Sample 4	The product is stable. The product is stable. The product is stable. The product is stable.
<b>Possibility of hazardous reactions</b>	:  Sample 1  Sample 2  Sample 3  Sample 4	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:  Sample 1  Sample 2  Sample 3  Sample 4	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	:  Sample 1  Sample 2  Sample 3  Sample 4	Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	:  Sample 1  Sample 2  Sample 3  Sample 4	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>Sample 1</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Sample 2</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Sample 3</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Sample 4</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Sample 1</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
<b>Sample 2</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
<b>Sample 3</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
<b>Sample 4</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

#### Sensitization

Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Classification

## Section 11. Toxicological information

Product/ingredient name	IARC	NTP	ACGIH
<b>Sample 1</b> Acetonitrile	-	-	A4
<b>Sample 2</b> Acetonitrile	-	-	A4
<b>Sample 3</b> Acetonitrile	-	-	A4
<b>Sample 4</b> Acetonitrile	-	-	A4

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
<b>Sample 1</b> Acetonitrile	Category 2	-	blood system, central nervous system (CNS), kidneys, liver
<b>Sample 2</b> Acetonitrile	Category 2	-	blood system, central nervous system (CNS), kidneys, liver
<b>Sample 3</b> Acetonitrile	Category 2	-	blood system, central nervous system (CNS), kidneys, liver
<b>Sample 4</b> Acetonitrile	Category 2	-	blood system, central nervous system (CNS), kidneys, liver

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

:  Sample 1  
Sample 2  
Sample 3  
Sample 4

Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

## Section 11. Toxicological information

<b>Eye contact</b>	: Sample 1	Causes serious eye irritation.
	Sample 2	Causes serious eye irritation.
	Sample 3	Causes serious eye irritation.
	Sample 4	Causes serious eye irritation.
<b>Inhalation</b>	: Sample 1	Harmful if inhaled.
	Sample 2	Harmful if inhaled.
	Sample 3	Harmful if inhaled.
	Sample 4	Harmful if inhaled.
<b>Skin contact</b>	: Sample 1	Harmful in contact with skin.
	Sample 2	Harmful in contact with skin.
	Sample 3	Harmful in contact with skin.
	Sample 4	Harmful in contact with skin.
<b>Ingestion</b>	: Sample 1	Harmful if swallowed.
	Sample 2	Harmful if swallowed.
	Sample 3	Harmful if swallowed.
	Sample 4	Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: Sample 1	Adverse symptoms may include the following: pain or irritation watering redness
	Sample 2	Adverse symptoms may include the following: pain or irritation watering redness
	Sample 3	Adverse symptoms may include the following: pain or irritation watering redness
	Sample 4	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: Sample 1	No specific data.
	Sample 2	No specific data.
	Sample 3	No specific data.
	Sample 4	No specific data.
<b>Skin contact</b>	: Sample 1	No specific data.
	Sample 2	No specific data.
	Sample 3	No specific data.
	Sample 4	No specific data.
<b>Ingestion</b>	: Sample 1	No specific data.
	Sample 2	No specific data.
	Sample 3	No specific data.
	Sample 4	No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3 Sample 4	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>Sample 1</b> Sample 1 Acetonitrile	503.0 500	1106.7 1100	N/A N/A	11.1 11	N/A N/A
<b>Sample 2</b> Sample 2 Acetonitrile	503.0 500	1106.7 1100	N/A N/A	11.1 11	N/A N/A
<b>Sample 3</b> Sample 3 Acetonitrile	503.0 500	1106.7 1100	N/A N/A	11.1 11	N/A N/A
<b>Sample 4</b> Sample 4 Acetonitrile	503.1 500	1106.8 1100	N/A N/A	11.1 11	N/A N/A

<b>Other information</b>	: <input checked="" type="checkbox"/> Sample 1 Sample 2 Sample 3	Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death. Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death. Adverse symptoms include the following: May cause
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## Section 11. Toxicological information

Sample 4

headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.

Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Sample 1</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i>	96 hours 48 hours 96 hours 96 hours 21 days
<b>Sample 2</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i>	96 hours 48 hours 96 hours 96 hours 21 days
<b>Sample 3</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i>	96 hours 48 hours 96 hours 96 hours 21 days
<b>Sample 4</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Aquatic plants - <i>Lemna minor</i> Daphnia - <i>Daphnia magna</i>	96 hours 48 hours 96 hours 96 hours 21 days

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Sample 1</b> Acetonitrile	OECD 310 Ready Biodegradability - CO <sub>2</sub> in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge
<b>Sample 2</b> Acetonitrile	OECD 310	70 % - Readily - 21 days	-	Activated sludge

## Section 12. Ecological information

<b>Sample 3</b> Acetonitrile	Ready Biodegradability - CO <sub>2</sub> in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge
<b>Sample 4</b> Acetonitrile	OECD 310 Ready Biodegradability - CO <sub>2</sub> in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Sample 1</b> Acetonitrile	-	-	Readily
<b>Sample 2</b> Acetonitrile	-	-	Readily
<b>Sample 3</b> Acetonitrile	-	-	Readily
<b>Sample 4</b> Acetonitrile	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Sample 1</b> Acetonitrile	-0.34	3	Low
<b>Sample 2</b> Acetonitrile	-0.34	3	Low
<b>Sample 3</b> Acetonitrile	-0.34	3	Low
<b>Sample 4</b> Acetonitrile	-0.34	3	Low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.




## Section 12. Ecological information

**Other adverse effects** :  No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** :  The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	TDG Classification	IMDG	IATA
<b>UN number</b>	UN1648	UN1648	UN1648
<b>UN proper shipping name</b>	<input checked="" type="checkbox"/> ACETONITRILE solution	ACETONITRILE solution	Acetonitrile solution
<b>Transport hazard class(es)</b>	3 	3 	3 
<b>Packing group</b>	II	II	II
<b>Environmental hazards</b>	<input checked="" type="checkbox"/> No.	No.	No.

**Proof of classification statement** :  Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

### Additional information

**Remarks:** Excepted Quantity

**TDG Classification** :  Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

**Explosive Limit and Limited Quantity Index 1**

**Passenger Carrying Road or Rail Index 5**

**IMDG** :  **Emergency schedules** F-E, S-D

**IATA** :  **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 14. Transport information

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : The following components are listed: acetonitrile

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Canada** : Not determined.

**United States** : Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 08/01/2023

**Date of previous issue** : 12/03/2015

**Version** : 3

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
HPR = Hazardous Products Regulations  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
UN = United Nations

### Procedure used to derive the classification

## Section 16. Other information

Classification	Justification
<p><b>Sample 1</b>            FLAMMABLE LIQUIDS - Category 2            ACUTE TOXICITY (oral) - Category 4            ACUTE TOXICITY (dermal) - Category 4            ACUTE TOXICITY (inhalation) - Category 4            EYE IRRITATION - Category 2A            SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p>	<p>On basis of test data            Calculation method            Calculation method            Calculation method            Calculation method            Calculation method</p>
<p><b>Sample 2</b>            FLAMMABLE LIQUIDS - Category 2            ACUTE TOXICITY (oral) - Category 4            ACUTE TOXICITY (dermal) - Category 4            ACUTE TOXICITY (inhalation) - Category 4            EYE IRRITATION - Category 2A            SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p>	<p>On basis of test data            Calculation method            Calculation method            Calculation method            Calculation method            Calculation method</p>
<p><b>Sample 3</b>            FLAMMABLE LIQUIDS - Category 2            ACUTE TOXICITY (oral) - Category 4            ACUTE TOXICITY (dermal) - Category 4            ACUTE TOXICITY (inhalation) - Category 4            EYE IRRITATION - Category 2A            SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p>	<p>On basis of test data            Calculation method            Calculation method            Calculation method            Calculation method            Calculation method</p>
<p><b>Sample 4</b>            FLAMMABLE LIQUIDS - Category 2            ACUTE TOXICITY (oral) - Category 4            ACUTE TOXICITY (dermal) - Category 4            ACUTE TOXICITY (inhalation) - Category 4            EYE IRRITATION - Category 2A            SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p>	<p>On basis of test data            Calculation method            Calculation method            Calculation method            Calculation method            Calculation method</p>

 Indicates information that has changed from previously issued version.

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