Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

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.

Sample 1	1.75 ml
Sample 2	1.75 ml
Sample 3	1.75 ml
Sample 4	1.75 ml

Supplier/Manufacturer :

Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) 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
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

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
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

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
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

Sample 4

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H312	ACUTE TOXICITY (dermal) - Category 4
H332	ACUTE TOXICITY (inhalation) - Category 4
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

Section 2. Hazard(s) identification

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 vapour.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H318 - Causes serious eye damage.

Sample 2
H225 - Highly flammable liquid and vapour.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H318 - Causes serious eye damage.

Sample 3
H225 - Highly flammable liquid and vapour.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H318 - Causes serious eye damage.

Sample 4
H225 - Highly flammable liquid and vapour.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H318 - Causes serious eye damage.

Precautionary statements

Prevention :

Sample 1
P280 - Wear protective gloves and protective clothing. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapour.

Sample 2
P280 - Wear protective gloves and protective clothing. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapour.

Sample 3
P280 - Wear protective gloves and protective clothing. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapour.

Sample 4
P280 - Wear protective gloves and protective clothing. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks,

Section 2. Hazard(s) identification

			open flames and other ignition sources. No smoking. P261 - Avoid breathing vapour.
Response	:	Sample 1	P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
		Sample 2	P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
		Sample 3	P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
		Sample 4	P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Sample 1	Not applicable.
		Sample 2	Not applicable.
		Sample 3	Not applicable.
		Sample 4	Not applicable.
Disposal	:	Sample 1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Sample 2	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Sample 3	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Sample 4	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

Additional warning phrases	:	Sample 1	Not applicable.
		Sample 2	Not applicable.
		Sample 3	Not applicable.
		Sample 4	Not applicable.
Other hazards which do not result in classification	:	Sample 1	None known.
		Sample 2	None known.
		Sample 3	None known.
		Sample 4	None known.

Section 3. Composition and ingredient information

Substance/mixture	:	Sample 1	Mixture
		Sample 2	Mixture
		Sample 3	Mixture
		Sample 4	Mixture

CAS number/other identifiers

Section 3. Composition and ingredient information

Ingredient name	% (w/w)	CAS number
Sample 1		
Acetonitrile	≥90	75-05-8
Sample 2		
Acetonitrile	≥90	75-05-8
Sample 3		
Acetonitrile	≥90	75-05-8
Sample 4		
Acetonitrile	≥90	75-05-8

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Sample 2: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Sample 3: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Sample 4: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Section 4. First aid measures

Inhalation :

Sample 1

Get medical attention immediately. Call a poison center or physician. 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. 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

Get medical attention immediately. Call a poison center or physician. 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. 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 3

Get medical attention immediately. Call a poison center or physician. 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. 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

Get medical attention immediately. Call a poison center or physician. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

Section 4. First aid measures

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

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Sample 2

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Sample 3

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Sample 4

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Sample 1

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a 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

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an

Section 4. First aid measures

		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	Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a 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 4	Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a 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

Eye contact	:	Sample 1	Causes serious eye damage.
		Sample 2	Causes serious eye damage.
		Sample 3	Causes serious eye damage.
		Sample 4	Causes serious eye damage.
Inhalation	:	Sample 1	Harmful if inhaled.
		Sample 2	Harmful if inhaled.
		Sample 3	Harmful if inhaled.
		Sample 4	Harmful if inhaled.
Skin contact	:	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.
Ingestion	:	Sample 1	Harmful if swallowed.
		Sample 2	Harmful if swallowed.
		Sample 3	Harmful if swallowed.
		Sample 4	Harmful if swallowed.

Over-exposure signs/symptoms

Section 4. First aid measures

Eye contact :

Sample 1	Adverse symptoms may include the following: pain watering redness
Sample 2	Adverse symptoms may include the following: pain watering redness
Sample 3	Adverse symptoms may include the following: pain watering redness
Sample 4	Adverse symptoms may include the following: pain watering redness

Inhalation :

Sample 1	No specific data.
Sample 2	No specific data.
Sample 3	No specific data.
Sample 4	No specific data.

Skin contact :

Sample 1	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Sample 2	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Sample 3	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Sample 4	Adverse symptoms may include the following: pain or irritation redness blistering may occur

Ingestion :

Sample 1	Adverse symptoms may include the following: stomach pains
Sample 2	Adverse symptoms may include the following: stomach pains
Sample 3	Adverse symptoms may include the following: stomach pains
Sample 4	Adverse symptoms may include the following: stomach pains

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

Notes to physician :

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

Section 4. First aid measures

surveillance for 48 hours.

Specific treatments : Sample 1 — No specific treatment.
Sample 2 — No specific treatment.
Sample 3 — No specific treatment.
Sample 4 — No specific treatment.

Protection of first-aiders : 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 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. Firefighting measures

Extinguishing media

Suitable extinguishing media : Sample 1 — Use dry chemical, CO_2, water spray (fog) or foam.
Sample 2 — Use dry chemical, CO_2, water spray (fog) or foam.
Sample 3 — Use dry chemical, CO_2, water spray (fog) or foam.
Sample 4 — Use dry chemical, CO_2, 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 vapour. 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 vapour. 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

Section 5. Firefighting measures

		explosion.
	Sample 3	Highly flammable liquid and vapour. 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 vapour. 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: 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.

Section 5. Firefighting measures

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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders :

Sample 1: If specialised 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 specialised 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 specialised 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 specialised 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: Avoid dispersal of spilt 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 spilt 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 spilt 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 4: Avoid dispersal of spilt 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 material 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

Section 6. Accidental release measures

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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces

Section 7. Handling and storage

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.

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.

Conditions for safe storage, including any incompatibilities

: 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment

Section 7. Handling and storage

	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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sample 1 Acetonitrile	**Safe Work Australia (Australia, 10/2022). Absorbed through skin.** STEL: 101 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 67 mg/m³ 8 hours. TWA: 40 ppm 8 hours.
Sample 2 Acetonitrile	**Safe Work Australia (Australia, 10/2022). Absorbed through skin.** STEL: 101 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 67 mg/m³ 8 hours. TWA: 40 ppm 8 hours.
Sample 3 Acetonitrile	**Safe Work Australia (Australia, 10/2022). Absorbed through skin.** STEL: 101 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 67 mg/m³ 8 hours. TWA: 40 ppm 8 hours.
Sample 4 Acetonitrile	**Safe Work Australia (Australia, 10/2022).**

Section 8. Exposure controls and personal protection

	Absorbed through skin. STEL: 101 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 67 mg/m³ 8 hours. TWA: 40 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, vapour 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin 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

Physical state	:	Sample 1	Liquid.
		Sample 2	Liquid.
		Sample 3	Liquid.
		Sample 4	Liquid.
Colour	:	Sample 1	Not available.
		Sample 2	Not available.
		Sample 3	Not available.
		Sample 4	Not available.
Odour	:	Sample 1	Not available.
		Sample 2	Not available.
		Sample 3	Not available.
		Sample 4	Not available.
Odour threshold	:	Sample 1	Not available.
		Sample 2	Not available.
		Sample 3	Not available.
		Sample 4	Not available.
pH	:	Sample 1	Not available.
		Sample 2	Not available.
		Sample 3	Not available.
		Sample 4	Not available.
Melting point/freezing point	:	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)
Boiling point, initial boiling point, and boiling range	:	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)
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%
Vapour pressure	:		

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Sample 1						
Acetonitrile	70.89	9.5	-	-	-	-
Sample 2						
Acetonitrile	70.89	9.5	-	-	-	-
Sample 3						
Acetonitrile	70.89	9.5	-	-	-	-
Sample 4						
Acetonitrile	70.89	9.5	-	-	-	-

Relative vapour 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.

Solubility(ies) :

Media	Result
Sample 1	
water	Soluble
Sample 2	
water	Soluble
Sample 3	
water	Soluble
Sample 4	
water	Soluble

Partition coefficient: n-octanol/water :
Sample 1 Not applicable.
Sample 2 Not applicable.
Sample 3 Not applicable.
Sample 4 Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Sample 1			
Acetonitrile	524	975.2	-
Sample 2			
Acetonitrile	524	975.2	-
Sample 3			
Acetonitrile	524	975.2	-
Sample 4			

Section 9. Physical and chemical properties and safety characteristics

Acetonitrile	524	975.2	-

Decomposition temperature :
Sample 1: Not available.
Sample 2: Not available.
Sample 3: Not available.
Sample 4: Not available.

Viscosity :
Sample 1: Not available.
Sample 2: Not available.
Sample 3: Not available.
Sample 4: Not available.

Particle characteristics

Median particle size :
Sample 1: Not applicable.
Sample 2: Not applicable.
Sample 3: Not applicable.
Sample 4: Not applicable.

Section 10. Stability and reactivity

Reactivity :
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.

Chemical stability :
Sample 1: The product is stable.
Sample 2: The product is stable.
Sample 3: The product is stable.
Sample 4: The product is stable.

Possibility of hazardous reactions :
Sample 1: Under normal conditions of storage and use, hazardous reactions will not occur.
Sample 2: Under normal conditions of storage and use, hazardous reactions will not occur.
Sample 3: Under normal conditions of storage and use, hazardous reactions will not occur.
Sample 4: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid :
Sample 1: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Sample 2: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Sample 3: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Sample 4: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Section 10. Stability and reactivity

Incompatible materials :

Sample 1	Reactive or incompatible with the following materials: oxidising materials
Sample 2	Reactive or incompatible with the following materials: oxidising materials
Sample 3	Reactive or incompatible with the following materials: oxidising materials
Sample 4	Reactive or incompatible with the following materials: oxidising materials

Hazardous decomposition products :

Sample 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Sample 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Sample 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Sample 4	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
Sample 1				
Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
Sample 2				
Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
Sample 3				
Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
Sample 4				
Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-

Irritation/Corrosion

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

Section 11. Toxicological information

Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

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)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure :

Sample 1	Routes of entry anticipated: Oral, Dermal, Inhalation.
Sample 2	Routes of entry anticipated: Oral, Dermal, Inhalation.
Sample 3	Routes of entry anticipated: Oral, Dermal, Inhalation.
Sample 4	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact :

Sample 1	Causes serious eye damage.
Sample 2	Causes serious eye damage.
Sample 3	Causes serious eye damage.
Sample 4	Causes serious eye damage.

Inhalation :

Sample 1	Harmful if inhaled.
Sample 2	Harmful if inhaled.
Sample 3	Harmful if inhaled.
Sample 4	Harmful if inhaled.

Skin contact :

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.

Ingestion :

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

Eye contact :

Sample 1	Adverse symptoms may include the following: pain watering redness
Sample 2	Adverse symptoms may include the following: pain watering redness
Sample 3	Adverse symptoms may include the following: pain

Section 11. Toxicological information

			watering redness
		Sample 4	Adverse symptoms may include the following: pain watering redness
Inhalation	:	Sample 1	No specific data.
		Sample 2	No specific data.
		Sample 3	No specific data.
		Sample 4	No specific data.
Skin contact	:	Sample 1	Adverse symptoms may include the following: pain or irritation redness blistering may occur
		Sample 2	Adverse symptoms may include the following: pain or irritation redness blistering may occur
		Sample 3	Adverse symptoms may include the following: pain or irritation redness blistering may occur
		Sample 4	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	:	Sample 1	Adverse symptoms may include the following: stomach pains
		Sample 2	Adverse symptoms may include the following: stomach pains
		Sample 3	Adverse symptoms may include the following: stomach pains
		Sample 4	Adverse symptoms may include the following: stomach pains

Delayed and immediate effects as well as 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.

Potential delayed effects : Not available.

Potential chronic health effects

General	:	Sample 1	No known significant effects or critical hazards.
		Sample 2	No known significant effects or critical hazards.
		Sample 3	No known significant effects or critical hazards.
		Sample 4	No known significant effects or critical hazards.
Carcinogenicity	:	Sample 1	No known significant effects or critical hazards.
		Sample 2	No known significant effects or critical hazards.
		Sample 3	No known significant effects or critical hazards.
		Sample 4	No known significant effects or critical hazards.
Mutagenicity	:	Sample 1	No known significant effects or critical hazards.
		Sample 2	No known significant effects or critical hazards.
		Sample 3	No known significant effects or critical hazards.
		Sample 4	No known significant effects or critical hazards.

Section 11. Toxicological information

Reproductive toxicity :

Sample 1	No known significant effects or critical hazards.
Sample 2	No known significant effects or critical hazards.
Sample 3	No known significant effects or critical hazards.
Sample 4	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 (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Sample 1					
Sample 1	503.0	1106.7	N/A	11.1	N/A
Acetonitrile	500	1100	N/A	11	N/A
Sample 2					
Sample 2	503.0	1106.7	N/A	11.1	N/A
Acetonitrile	500	1100	N/A	11	N/A
Sample 3					
Sample 3	503.0	1106.7	N/A	11.1	N/A
Acetonitrile	500	1100	N/A	11	N/A
Sample 4					
Sample 4	503.1	1106.8	N/A	11.1	N/A
Acetonitrile	500	1100	N/A	11	N/A

Other information :

Sample 1	Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
Sample 2	Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
Sample 3	Adverse symptoms include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
Sample 4	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
Sample 1			
Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - *Daphnia magna*	21 days
Sample 2			
Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours

Section 12. Ecological information

	Acute LC50 3600000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - *Daphnia magna*	21 days
Sample 3			
Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - *Daphnia magna*	21 days
Sample 4			
Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - *Daphnia magna*	21 days

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Sample 1				
Acetonitrile	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge
Sample 2				
Acetonitrile	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge
Sample 3				
Acetonitrile	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge
Sample 4				
Acetonitrile	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge

Section 12. Ecological information

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

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Sample 1 Acetonitrile	-0.34	3	Low
Sample 2 Acetonitrile	-0.34	3	Low
Sample 3 Acetonitrile	-0.34	3	Low
Sample 4 Acetonitrile	-0.34	3	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	IMDG	IATA
UN number	UN1648	UN1648	UN1648
UN proper shipping name	ACETONITRILE solution	ACETONITRILE solution	Acetonitrile solution
Transport hazard class(es)	3 	3 	3 
Packing group	II	II	II
Environmental hazards	No.	No.	No.

Additional information

Remarks: Excepted Quantity

ADG : **Hazchem code** •2YE

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

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

Australia : Not determined.

New Zealand : Not determined.

Section 15. Regulatory information

United States : Not determined.

Section 16. Any other relevant information

History

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

Date of previous issue : 03/12/2015

Version : 3

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
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
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification	Justification
Sample 1	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
Sample 2	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
Sample 3	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
Sample 4	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method

Indicates information that has changed from previously issued version.

Notice to reader

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