

SAFETY DATA SHEET



Caffeine Standards Kit for Capillary LC OQ_PV, Part Number 5065-4420

Section 1. Identification

Product identifier : Caffeine Standards Kit for Capillary LC OQ_PV, Part Number 5065-4420

Part no. (chemical kit) : 5065-4420

Part no. : Caffeine Standard for Capillary LC (2 µg/ mL) 5065-4420-1
 Caffeine Standard for Capillary LC (4 µg/ mL) 5065-4420-2
 Caffeine Standard for Capillary LC (20 µg/ mL) 5065-4420-3
 Caffeine Standard for Capillary LC (100 µg/mL) 5065-4420-4
 Caffeine Standard for Capillary LC (200 µg/mL) 5065-4420-5

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

Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use
 Caffeine Standard for Capillary LC (2 µg/ mL) 1 x 5 ml
 Caffeine Standard for Capillary LC (4 µg/ mL) 1 x 5 ml
 Caffeine Standard for Capillary LC (20 µg/ mL) 1 x 5 ml
 Caffeine Standard for Capillary LC (100 µg/mL) 1 x 5 ml
 Caffeine Standard for Capillary LC (200 µg/mL) 1 x 5 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

Not classified.

GHS label elements

Signal word : Caffeine Standard for Capillary LC (2 µg/mL) No signal word.
 Caffeine Standard for Capillary LC (4 µg/mL) No signal word.
 Caffeine Standard for Capillary LC (20 µg/mL) No signal word.
 Caffeine Standard for Capillary LC (100 µg/mL) No signal word.
 Caffeine Standard for Capillary LC (200 µg/mL) No signal word.

Section 2. Hazard(s) identification

Hazard statements	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.

Precautionary statements

Prevention	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not applicable.

Response	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not applicable.

Storage	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not applicable.

Disposal	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not applicable.

Supplemental label elements

Additional warning phrases	: ☑ Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for	Not applicable.

Section 2. Hazard(s) identification

Capillary LC (200 µg/mL)

Other hazards which do not result in classification	: Caffeine Standard for Capillary LC (2 µg/mL)	None known.
	Caffeine Standard for Capillary LC (4 µg/mL)	None known.
	Caffeine Standard for Capillary LC (20 µg/mL)	None known.
	Caffeine Standard for Capillary LC (100 µg/mL)	None known.
	Caffeine Standard for Capillary LC (200 µg/mL)	None known.

Section 3. Composition and ingredient information

Substance/mixture	: Caffeine Standard for Capillary LC (2 µg/mL)	Mixture
	Caffeine Standard for Capillary LC (4 µg/mL)	Mixture
	Caffeine Standard for Capillary LC (20 µg/mL)	Mixture
	Caffeine Standard for Capillary LC (100 µg/mL)	Mixture
	Caffeine Standard for Capillary LC (200 µg/mL)	Mixture

CAS number/other identifiers

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment 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	: Caffeine Standard for Capillary LC (2 µg/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Caffeine Standard for Capillary LC (4 µg/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Caffeine Standard for Capillary LC (20 µg/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Caffeine Standard for Capillary LC (100 µg/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Caffeine Standard for Capillary LC (200 µg/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Section 4. First aid measures

Inhalation	: Caffeine Standard for Capillary LC (2 µg/mL)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (4 µg/mL)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (20 µg/mL)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (100 µg/mL)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (200 µg/mL)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Caffeine Standard for Capillary LC (2 µg/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (4 µg/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (20 µg/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (100 µg/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (200 µg/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Caffeine Standard for Capillary LC (2 µg/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (4 µg/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (20 µg/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (100 µg/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Caffeine Standard for Capillary LC (200 µg/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Section 4. First aid measures

directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	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. No known significant effects or critical hazards.
Inhalation	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	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. No known significant effects or critical hazards.
Skin contact	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	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. No known significant effects or critical hazards.
Ingestion	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	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. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	No specific data. No specific data. No specific data. No specific data. No specific data.
--------------------	---	---

Section 4. First aid measures

Inhalation	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.
Skin contact	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.
Ingestion	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.

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

Notes to physician	: Caffeine Standard for Capillary LC (2 µg/mL)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Caffeine Standard for Capillary LC (4 µg/mL)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Caffeine Standard for Capillary LC (20 µg/mL)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Caffeine Standard for Capillary LC (100 µg/mL)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Caffeine Standard for Capillary LC (200 µg/mL)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific treatment.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific treatment.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific treatment.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific treatment.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific treatment.

Section 4. First aid measures

Protection of first-aiders	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.
-----------------------------------	---	--

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	None known. None known. None known. None known. None known.

Specific hazards arising from the chemical

: Caffeine Standard for Capillary LC (2 µg/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
: Caffeine Standard for Capillary LC (4 µg/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
: Caffeine Standard for Capillary LC (20 µg/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
: Caffeine Standard for Capillary LC (100 µg/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
: Caffeine Standard for Capillary LC (200 µg/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
: Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
: Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
: Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
: Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.

Section 5. Firefighting measures

Special protective actions for fire-fighters	: Caffeine Standard for Capillary LC (2 µg/mL)	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.
	Caffeine Standard for Capillary LC (4 µg/mL)	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.
	Caffeine Standard for Capillary LC (20 µg/mL)	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.
	Caffeine Standard for Capillary LC (100 µg/mL)	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.
	Caffeine Standard for Capillary LC (200 µg/mL)	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.
Special protective equipment for fire-fighters	: Caffeine Standard for Capillary LC (2 µg/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Caffeine Standard for Capillary LC (4 µg/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Caffeine Standard for Capillary LC (20 µg/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Caffeine Standard for Capillary LC (100 µg/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Caffeine Standard for Capillary LC (200 µg/mL)	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	: Caffeine Standard for Capillary LC (2 µg/mL)	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. Put on appropriate personal protective equipment.
	Caffeine Standard for Capillary LC (4 µg/mL)	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. Put on appropriate personal protective equipment.
	Caffeine Standard for Capillary LC (20 µg/mL)	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. Put on appropriate personal protective equipment.
	Caffeine Standard for	No action shall be taken involving any personal risk

Section 6. Accidental release measures

	Capillary LC (100 µg/mL)	or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	Caffeine Standard for Capillary LC (200 µg/mL)	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. Put on appropriate personal protective equipment.
For emergency responders	: Caffeine Standard for Capillary LC (2 µg/mL)	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".
	Caffeine Standard for Capillary LC (4 µg/mL)	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".
	Caffeine Standard for Capillary LC (20 µg/mL)	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".
	Caffeine Standard for Capillary LC (100 µg/mL)	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".
	Caffeine Standard for Capillary LC (200 µg/mL)	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	: Caffeine Standard for Capillary LC (2 µg/mL)	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).
	Caffeine Standard for Capillary LC (4 µg/mL)	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).
	Caffeine Standard for Capillary LC (20 µg/mL)	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).
	Caffeine Standard for Capillary LC (100 µg/mL)	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).
	Caffeine Standard for Capillary LC (200 µg/mL)	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

Section 6. Accidental release measures

Methods for cleaning up	: Caffeine Standard for Capillary LC (2 µg/mL)	Stop leak if without risk. Move containers from spill area. 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.
	Caffeine Standard for Capillary LC (4 µg/mL)	Stop leak if without risk. Move containers from spill area. 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.
	Caffeine Standard for Capillary LC (20 µg/mL)	Stop leak if without risk. Move containers from spill area. 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.
	Caffeine Standard for Capillary LC (100 µg/mL)	Stop leak if without risk. Move containers from spill area. 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.
	Caffeine Standard for Capillary LC (200 µg/mL)	Stop leak if without risk. Move containers from spill area. 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	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Caffeine Standard for Capillary LC (2 µg/mL)	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.
	Caffeine Standard for Capillary LC (4 µg/mL)	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.
	Caffeine Standard for Capillary LC (20 µg/mL)	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

Section 7. Handling and storage

Caffeine Standard for
Capillary LC (100 µg/mL)

before entering eating areas. See also Section 8 for additional information on hygiene measures.

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.

Caffeine Standard for
Capillary LC (200 µg/mL)

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

Caffeine Standard for
Capillary LC (2 µg/mL)

Store in accordance with local regulations. 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. 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.

Caffeine Standard for
Capillary LC (4 µg/mL)

Store in accordance with local regulations. 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. 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.

Caffeine Standard for
Capillary LC (20 µg/mL)

Store in accordance with local regulations. 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. 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.

Caffeine Standard for
Capillary LC (100 µg/mL)

Store in accordance with local regulations. 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. 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.

Caffeine Standard for
Capillary LC (200 µg/mL)

Store in accordance with local regulations. Store in original container protected from direct sunlight in a

Section 7. Handling and storage

dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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: safety glasses with side-shields.
- 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.
- 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.
- 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

Appearance

- Physical state** : Caffeine Standard for Capillary LC (2 µg/mL) Liquid.
Caffeine Standard for Capillary LC (4 µg/mL) Liquid.
Caffeine Standard for Capillary LC (20 µg/mL) Liquid.
Caffeine Standard for Capillary LC (100 µg/mL) Liquid.

Section 9. Physical and chemical properties

	Capillary LC (100 µg/mL)	
	Caffeine Standard for	Liquid.
	Capillary LC (200 µg/mL)	
Colour	: Caffeine Standard for	Not available.
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (200 µg/mL)	
Odour	: Caffeine Standard for	Not available.
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (200 µg/mL)	
Odour threshold	: Caffeine Standard for	Not available.
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (200 µg/mL)	
pH	: Caffeine Standard for	Not available.
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	Not available.
	Capillary LC (200 µg/mL)	
Melting point	: Caffeine Standard for	0°C (32°F)
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	0°C (32°F)
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	0°C (32°F)
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	0°C (32°F)
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	0°C (32°F)
	Capillary LC (200 µg/mL)	
Boiling point	: Caffeine Standard for	100°C (212°F)
	Capillary LC (2 µg/mL)	
	Caffeine Standard for	100°C (212°F)
	Capillary LC (4 µg/mL)	
	Caffeine Standard for	100°C (212°F)
	Capillary LC (20 µg/mL)	
	Caffeine Standard for	100°C (212°F)
	Capillary LC (100 µg/mL)	
	Caffeine Standard for	100°C (212°F)

Section 9. Physical and chemical properties

	Capillary LC (200 µg/mL)	
Flash point	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Evaporation rate	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Flammability (solid, gas)	: Caffeine Standard for Capillary LC (2 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not applicable.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not applicable.
Lower and upper explosive (flammable) limits	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Vapour pressure	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Vapour density	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.

Section 9. Physical and chemical properties

Relative density	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Solubility	: Caffeine Standard for Capillary LC (2 µg/mL)	Easily soluble in the following materials: cold water and hot water.
	Caffeine Standard for Capillary LC (4 µg/mL)	Easily soluble in the following materials: cold water and hot water.
	Caffeine Standard for Capillary LC (20 µg/mL)	Easily soluble in the following materials: cold water and hot water.
	Caffeine Standard for Capillary LC (100 µg/mL)	Easily soluble in the following materials: cold water and hot water.
	Caffeine Standard for Capillary LC (200 µg/mL)	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Auto-ignition temperature	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Decomposition temperature	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.
Viscosity	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.

Section 10. Stability and reactivity

Reactivity	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	The product is stable. The product is stable. The product is stable. The product is stable. The product is stable.
Possibility of hazardous reactions	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	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. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	No specific data. No specific data. No specific data. No specific data.
Incompatible materials	: Caffeine Standard for Capillary LC (2 µg/mL) Caffeine Standard for Capillary LC (4 µg/mL) Caffeine Standard for Capillary LC (20 µg/mL) Caffeine Standard for Capillary LC (100 µg/mL) Caffeine Standard for Capillary LC (200 µg/mL)	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.

Section 10. Stability and reactivity

Hazardous decomposition products	: Caffeine Standard for Capillary LC (2 µg/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Caffeine Standard for Capillary LC (4 µg/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Caffeine Standard for Capillary LC (20 µg/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Caffeine Standard for Capillary LC (100 µg/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Caffeine Standard for Capillary LC (200 µg/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

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	: Caffeine Standard for Capillary LC (2 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (4 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (20 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (100 µg/mL)	Not available.
	Caffeine Standard for Capillary LC (200 µg/mL)	Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Inhalation	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Skin contact	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Ingestion	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.
Inhalation	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.

Section 11. Toxicological information

Skin contact	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.
Ingestion	: Caffeine Standard for Capillary LC (2 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (4 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (20 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (100 µg/mL)	No specific data.
	Caffeine Standard for Capillary LC (200 µg/mL)	No specific data.

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	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Carcinogenicity	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Mutagenicity	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for	No known significant effects or critical hazards.

Section 11. Toxicological information

	Capillary LC (200 µg/mL)	
Teratogenicity	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Developmental effects	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.
Fertility effects	: Caffeine Standard for Capillary LC (2 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (4 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (20 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (100 µg/mL)	No known significant effects or critical hazards.
	Caffeine Standard for Capillary LC (200 µg/mL)	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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 Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine 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 (Annexes A, B, C, E)

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 : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan : **Japan inventory (ENCS):** All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.

Section 15. Regulatory information

Taiwan	: All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: <input checked="" type="checkbox"/> All components are listed or exempted.
United States	: All components are listed or exempted.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 30/04/2018

Date of previous issue : 20/05/2016

Version : 5

Key to abbreviations

: ADG = Australian Dangerous Goods
 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)
 NOHSC = National Occupational Health and Safety Commission
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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