

SAFETY DATA SHEET



Enterprise Edition Caffeine Standards Kit, Part Number 5190-0488

Section 1. Identification

1.1 Product identifier

Product name : Enterprise Edition Caffeine Standards Kit, Part Number 5190-0488

Part No. (Chemical Kit) : 5190-0488

Part No. :

Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	5190-0488-1
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	5190-0488-2
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	5190-0488-3
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	5190-0488-4
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	5190-0488-5
Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	5190-0488-6
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	5190-0488-7
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	5190-0488-8

Validation date : 11/16/2016

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

Material uses : Analytical chemistry.

Enterprise Caffeine Standard – Cal #1 (0.5 ug/ mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #5 (25 ug/ mL)	2 x 2 ml
Enterprise Caffeine Standard – Cal #6 (50 ug/ mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #7 (100 ug/ mL)	1 x 2 ml
Enterprise Caffeine Standard – Cal #8 (200 ug/ mL)	1 x 2 ml

1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

Not classified.

2.2 GHS label elements

Signal word :

Section 2. Hazards identification

	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No signal word.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No signal word.
Hazard statements	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
Precautionary statements		
Prevention	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not applicable.
Response	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not applicable.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not applicable.
	Enterprise Caffeine Standard –	Not applicable.

Section 2. Hazards identification

	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #8 (200 ug/mL)	
Storage	:	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #8 (200 ug/mL)	
Disposal	:	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #8 (200 ug/mL)	
Supplemental label elements	:	
	Enterprise Caffeine Standard –	None known.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	None known.
	Cal #8 (200 ug/mL)	

2.3 Other hazards

Section 2. Hazards identification

Hazards not otherwise classified	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	None known.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Mixture
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

4.1 Description of necessary first aid measures

Eye contact	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/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.
		Enterprise Caffeine Standard – Cal #2 (1 ug/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.
		Enterprise Caffeine Standard – Cal #3 (2 ug/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.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Section 4. First aid measures

Check for and remove any contact lenses. Get medical attention if irritation occurs.

Enterprise Caffeine Standard –
Cal #5 (25 ug/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.

Enterprise Caffeine Standard –
Cal #6 (50 ug/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.

Enterprise Caffeine Standard –
Cal #7 (100 ug/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.

Enterprise Caffeine Standard –
Cal #8 (200 ug/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.

Inhalation

: Enterprise Caffeine Standard –
Cal #1 (0.5 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #2 (1 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #3 (2 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #4 (5 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #5 (25 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #6 (50 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #7 (100 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #8 (200 ug/mL)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact

: Enterprise Caffeine Standard –
Cal #1 (0.5 ug/mL)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #2 (1 ug/mL)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #3 (2 ug/mL)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #4 (5 ug/mL)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –
Cal #5 (25 ug/mL)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Enterprise Caffeine Standard –

Flush contaminated skin with plenty of water.

Section 4. First aid measures

Ingestion

Cal #6 (50 ug/mL)	Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
: Enterprise Caffeine Standard – Cal #1 (0.5 ug/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.
Enterprise Caffeine Standard – Cal #2 (1 ug/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.
Enterprise Caffeine Standard – Cal #3 (2 ug/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.
Enterprise Caffeine Standard – Cal #4 (5 ug/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.
Enterprise Caffeine Standard – Cal #5 (25 ug/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.
Enterprise Caffeine Standard – Cal #6 (50 ug/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.
Enterprise Caffeine Standard – Cal #7 (100 ug/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.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable

Section 4. First aid measures

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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
Inhalation	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
Skin contact	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific data.

Inhalation	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific data.

Skin contact	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific data.
	Enterprise Caffeine Standard –	No specific data.

Section 4. First aid measures

	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #8 (200 ug/mL)	
Ingestion	:	Enterprise Caffeine Standard –
		Cal #1 (0.5 ug/mL)
		Enterprise Caffeine Standard –
		Cal #2 (1 ug/mL)
		Enterprise Caffeine Standard –
		Cal #3 (2 ug/mL)
		Enterprise Caffeine Standard –
		Cal #4 (5 ug/mL)
		Enterprise Caffeine Standard –
		Cal #5 (25 ug/mL)
		Enterprise Caffeine Standard –
		Cal #6 (50 ug/mL)
		Enterprise Caffeine Standard –
		Cal #7 (100 ug/mL)
		Enterprise Caffeine Standard –
		Cal #8 (200 ug/mL)

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

Notes to physician	:	Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #4 (5 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #5 (25 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #6 (50 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #7 (100 ug/mL)	
		Enterprise Caffeine Standard –	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Cal #8 (200 ug/mL)	
Specific treatments	:	Enterprise Caffeine Standard –	No specific treatment.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	No specific treatment.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	No specific treatment.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	No specific treatment.
		Cal #4 (5 ug/mL)	

Section 4. First aid measures

	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific treatment.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific treatment.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific treatment.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific treatment.
Protection of first-aiders	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	None known.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	None known.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	None known.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	None known.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	None known.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	None known.

Section 5. Fire-fighting measures

Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	None known.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific data.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Enterprise Caffeine Standard – Cal #1 (0.5 ug/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.
Enterprise Caffeine Standard – Cal #2 (1 ug/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.
Enterprise Caffeine Standard – Cal #3 (2 ug/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.
Enterprise Caffeine Standard – Cal #4 (5 ug/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.
Enterprise Caffeine Standard –	Promptly isolate the scene by removing all persons

Section 5. Fire-fighting measures

	Cal #5 (25 ug/mL)	from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Enterprise Caffeine Standard – Cal #6 (50 ug/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.
	Enterprise Caffeine Standard – Cal #7 (100 ug/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.
	Enterprise Caffeine Standard – Cal #8 (200 ug/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	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Enterprise Caffeine Standard – Cal #8 (200 ug/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

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/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 spilled material. Put on appropriate personal protective equipment.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No action shall be taken involving any personal risk or without suitable training. Evacuate

Section 6. Accidental release measures

Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Enterprise Caffeine Standard – Cal #4 (5 ug/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 spilled material. Put on appropriate personal protective equipment.
Enterprise Caffeine Standard – Cal #5 (25 ug/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 spilled material. Put on appropriate personal protective equipment.
Enterprise Caffeine Standard – Cal #6 (50 ug/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 spilled material. Put on appropriate personal protective equipment.
Enterprise Caffeine Standard – Cal #7 (100 ug/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 spilled material. Put on appropriate personal protective equipment.
Enterprise Caffeine Standard – Cal #8 (200 ug/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 spilled material. Put on appropriate personal protective equipment.
For emergency responders : Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also

Section 6. Accidental release measures

	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	the information in "For non-emergency personnel". If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Methods for cleaning up	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/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.
	Enterprise Caffeine Standard – Cal #2 (1 ug/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.
	Enterprise Caffeine Standard – Cal #3 (2 ug/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.
	Enterprise Caffeine Standard – Cal #4 (5 ug/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.
	Enterprise Caffeine Standard – Cal #5 (25 ug/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.
	Enterprise Caffeine Standard – Cal #6 (50 ug/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.
	Enterprise Caffeine Standard – Cal #7 (100 ug/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.
	Enterprise Caffeine Standard – Cal #8 (200 ug/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

7.1 Precautions for safe handling

Protective measures	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Put on appropriate personal protective equipment (see Section 8).
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Put on appropriate personal protective equipment (see Section 8).
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Put on appropriate personal protective equipment (see Section 8).
	Enterprise Caffeine Standard –	Put on appropriate personal protective equipment

Section 7. Handling and storage

Advice on general occupational hygiene

Cal #4 (5 ug/mL) Enterprise Caffeine Standard – Cal #5 (25 ug/mL) Enterprise Caffeine Standard – Cal #6 (50 ug/mL) Enterprise Caffeine Standard – Cal #7 (100 ug/mL) Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	(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). Put on appropriate personal protective equipment (see Section 8).
: Enterprise Caffeine Standard – Cal #1 (0.5 ug/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.
Enterprise Caffeine Standard – Cal #2 (1 ug/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.
Enterprise Caffeine Standard – Cal #3 (2 ug/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.
Enterprise Caffeine Standard – Cal #4 (5 ug/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.
Enterprise Caffeine Standard – Cal #5 (25 ug/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.
Enterprise Caffeine Standard – Cal #6 (50 ug/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.
Enterprise Caffeine Standard – Cal #7 (100 ug/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.
Enterprise Caffeine Standard –	Eating, drinking and smoking should be prohibited

Section 7. Handling and storage

	Cal #8 (200 ug/mL)	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.
7.2 Conditions for safe storage, including any incompatibilities	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Store between the following temperatures: 15 to 30°C (59 to 86°F). 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Enterprise Caffeine Standard – Cal #2 (1 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Enterprise Caffeine Standard – Cal #3 (2 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Enterprise Caffeine Standard – Cal #4 (5 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Enterprise Caffeine Standard – Cal #5 (25 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 7. Handling and storage

Enterprise Caffeine Standard – Cal #6 (50 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
Enterprise Caffeine Standard – Cal #7 (100 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
Enterprise Caffeine Standard – Cal #8 (200 ug/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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations

Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Industrial applications, Professional applications.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Industrial applications, Professional applications.

Industrial sector specific solutions

Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not applicable.

Section 7. Handling and storage

Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not applicable.
Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
None.	

8.2 Exposure controls

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

[9.1 Information on basic physical and chemical properties](#)

Appearance

Physical state	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Liquid.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Liquid.
Color	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Colorless.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Colorless.
Odor	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Odor threshold	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.

Section 9. Physical and chemical properties

	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #8 (200 ug/mL)	
pH	: Enterprise Caffeine Standard –	Not available.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #8 (200 ug/mL)	
Melting point	: Enterprise Caffeine Standard –	0°C (32°F)
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	0°C (32°F)
	Cal #8 (200 ug/mL)	
Boiling point	: Enterprise Caffeine Standard –	100°C (212°F)
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	100°C (212°F)
	Cal #8 (200 ug/mL)	

Section 9. Physical and chemical properties

Flash point	: Enterprise Caffeine Standard –	Not available.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #4 (5 ug/mL)	
Evaporation rate	: Enterprise Caffeine Standard –	Not available.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #4 (5 ug/mL)	
Flammability (solid, gas)	: Enterprise Caffeine Standard –	Not applicable.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not applicable.
	Cal #4 (5 ug/mL)	
Lower and upper explosive (flammable) limits	: Enterprise Caffeine Standard –	Not available.
	Cal #1 (0.5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	Not available.
	Cal #5 (25 ug/mL)	

Section 9. Physical and chemical properties

	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Vapor pressure	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	2.3 kPa (17.452 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	2.3 kPa (17.542 mm Hg) [room temperature]
Vapor density	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Relative density	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	1
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	1
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	1
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	1
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	1
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	1
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	1
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	1

Section 9. Physical and chemical properties

Solubility	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Easily soluble in the following materials: cold water and hot water.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Auto-ignition temperature	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Decomposition temperature	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.

Section 9. Physical and chemical properties

	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
Viscosity	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.

Section 10. Stability and reactivity

10.1 Reactivity	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	The product is stable.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	The product is stable.

Section 10. Stability and reactivity

10.3 Possibility of hazardous reactions	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No specific data.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No specific data.
10.5 Incompatible materials	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	May react or be incompatible with oxidizing materials.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	May react or be incompatible with oxidizing materials.

Section 10. Stability and reactivity

10.6 Hazardous decomposition products	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	Not available.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	Not available.
	Potential acute health effects		
Eye contact	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
	Inhalation	:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
Skin contact		:	Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)
		Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.

Section 11. Toxicological information

	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #8 (200 ug/mL)	
Ingestion	:	Enterprise Caffeine Standard –
	Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
	Cal #8 (200 ug/mL)	

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Enterprise Caffeine Standard –
	Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard –	No specific data.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #8 (200 ug/mL)	
Inhalation	:	Enterprise Caffeine Standard –
	Cal #1 (0.5 ug/mL)	No specific data.
	Enterprise Caffeine Standard –	No specific data.
	Cal #2 (1 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #3 (2 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #4 (5 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #5 (25 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #6 (50 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #7 (100 ug/mL)	
	Enterprise Caffeine Standard –	No specific data.
	Cal #8 (200 ug/mL)	

Section 11. Toxicological information

Skin contact : Enterprise Caffeine Standard – No specific data.
 Cal #1 (0.5 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #2 (1 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #3 (2 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #4 (5 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #5 (25 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #6 (50 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #7 (100 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #8 (200 ug/mL)

Ingestion : Enterprise Caffeine Standard – No specific data.
 Cal #1 (0.5 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #2 (1 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #3 (2 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #4 (5 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #5 (25 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #6 (50 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #7 (100 ug/mL)
 Enterprise Caffeine Standard – No specific data.
 Cal #8 (200 ug/mL)

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #1 (0.5 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #2 (1 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #3 (2 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #4 (5 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #5 (25 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.
 Cal #6 (50 ug/mL)
 Enterprise Caffeine Standard – No known significant effects or critical hazards.

Section 11. Toxicological information

	Cal #7 (100 ug/mL)		
	Enterprise Caffeine Standard –		No known significant effects or critical hazards.
	Cal #8 (200 ug/mL)		
Carcinogenicity	:	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #4 (5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #5 (25 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #6 (50 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #7 (100 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #8 (200 ug/mL)	
Mutagenicity	:	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #4 (5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #5 (25 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #6 (50 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #7 (100 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #8 (200 ug/mL)	
Teratogenicity	:	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #4 (5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #5 (25 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #6 (50 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #7 (100 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #8 (200 ug/mL)	
Developmental effects	:	Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #1 (0.5 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #2 (1 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #3 (2 ug/mL)	
		Enterprise Caffeine Standard –	No known significant effects or critical hazards.
		Cal #4 (5 ug/mL)	

Section 11. Toxicological information

	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.
Fertility effects	: Enterprise Caffeine Standard – Cal #1 (0.5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #2 (1 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #3 (2 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #4 (5 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #5 (25 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #6 (50 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #7 (100 ug/mL)	No known significant effects or critical hazards.
	Enterprise Caffeine Standard – Cal #8 (200 ug/mL)	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

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

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

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

Regulatory information

DOT / IMDG / IATA : Not regulated.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Section 15. Regulatory information

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

No products were found.

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 inventory : 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): Not determined.

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.

Taiwan : All components are listed or exempted.

Turkey : Not determined.

Section 16. Other information

History

Date of issue : 11/16/2016

Date of previous issue : 05/20/2016.

Version : 4.1

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.