

Material Safety Data Sheet



ICP-MS Kit, Part Number G1820-60324

1. Product and company identification

Product name	: ICP-MS Kit, Part Number G1820-60324	
Material uses	: Analytical chemistry. A kit containing the following Agilent Part Number: 5184-3566; G1820-60254; G1820-60256; G1820-60275; G1820-60372; G1820-65236; G1820-60410; G1820-60258; G1820-60259.	
	250ml. Deionized Water for ICP-MS PN: G1820-60259	250 ml
	Nitric Acid Solution for ICP-MS PN: G1820-60258	250 ml
	Tuning Sample No.10 ICP-MS PN: G1820-60410	100 ml solution.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	100 ml solution.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	100 ml solution.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	100 ml solution.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	100 ml solution.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	100 ml solution.
	ICP-MS Tuning Solution PN: 5184-3566	A set of 2 x 500 mL
Supplier/Manufacturer	: Agilent Technologies, Inc. Logistics Center - Americas 500 Ships Landing Way New Castle, Delaware 19720	
Part No. (Chemical Kit)	: G1820-60324	
Part No.	250ml. Deionized Water for ICP-MS PN: G1820-60259	G1820-60259
	Nitric Acid Solution for ICP-MS PN: G1820-60258	G1820-60258
	Tuning Sample No.10 ICP-MS PN: G1820-60410	G1820-60410
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	G1820-65236
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	G1820-60372
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	G1820-60275
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	G1820-60256
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	G1820-60254
	ICP-MS Tuning Solution PN: 5184-3566	5184-3566
Validation date	: 02/5/2010	
In case of emergency	: 1-302-633-8777 1-877-4 Agilent (Information Telephone Number)	

2. Hazards identification

Physical state	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Liquid. Liquid. Liquid. Liquid. Liquid. Liquid. Liquid. Liquid. Liquid. Liquid.
Odor	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless.
OSHA/HCS status	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product. This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the
Date of issue :	02/5/2010	G1820-60324

2. Hazards identification

PN: G1820-60256	OSHA Hazard Communication Standard (29 CFR 1910.1200).
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
ICP-MS Tuning Solution PN: 5184-3566	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview

Signal word

: Nitric Acid Solution for ICP-MS PN: G1820-60258	DANGER!
Tuning Sample No.10 ICP-MS PN: G1820-60410	DANGER!
Tuning Sample No.9 for ICP-MS PN: G1820-65236	DANGER!
Tuning Sample No.7 for ICP-MS PN: G1820-60372	DANGER!
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	DANGER!
Tuning Sample No.3 for ICP-MS PN: G1820-60256	DANGER!
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	DANGER!
ICP-MS Tuning Solution PN: 5184-3566	DANGER!

Hazard statements

: 250ml. Deionized Water for ICP-MS PN: G1820-60259	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
Nitric Acid Solution for ICP-MS PN: G1820-60258	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No.10 ICP-MS PN: G1820-60410	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No.9 for ICP-MS PN: G1820-65236	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No.7 for ICP-MS PN: G1820-60372	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No.3 for ICP-MS PN: G1820-60256	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
ICP-MS Tuning Solution PN: 5184-3566	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS

2. Hazards identification

Precautions	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
	ICP-MS Tuning Solution PN: 5184-3566	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Not available.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Not available.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Not available.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Not available.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Not available.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Not available.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.

2. Hazards identification

	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
	ICP-MS Tuning Solution PN: 5184-3566	Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects		
Inhalation		
	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	No known significant effects or critical hazards.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	ICP-MS Tuning Solution PN: 5184-3566	Corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion		
	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	No known significant effects or critical hazards.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Corrosive to the digestive tract. Causes burns.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Corrosive to the digestive tract. Causes burns.
	ICP-MS Tuning Solution PN: 5184-3566	Corrosive to the digestive tract. Causes burns.

2. Hazards identification

Skin	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. Corrosive to the skin. Causes burns. Corrosive to the skin. Causes burns.
Eyes	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. Corrosive to eyes. Causes burns. Corrosive to eyes. Causes burns.
<u>Potential chronic health effects</u>		
Chronic effects	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data. Contains material that may cause target organ damage, based on animal data.

2. Hazards identification

Carcinogenicity	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. No known significant effects or critical hazards.

2. Hazards identification

Developmental effects	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	No known significant effects or critical hazards. No known significant effects or critical hazards.
Target organs	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS	Not available. Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth. Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth. Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth. Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth. Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth.

2. Hazards identification

PN: G1820-60256	the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth.
ICP-MS Tuning Solution PN: 5184-3566	Contains material which may cause damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth.

Over-exposure signs/symptoms

Inhalation

: 250ml. Deionized Water for ICP-MS PN: G1820-60259	No specific data.
Nitric Acid Solution for ICP-MS PN: G1820-60258	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No.10 ICP-MS PN: G1820-60410	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No.9 for ICP-MS PN: G1820-65236	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No.7 for ICP-MS PN: G1820-60372	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No.3 for ICP-MS PN: G1820-60256	Adverse symptoms may include the following: respiratory tract irritation coughing
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Adverse symptoms may include the following: respiratory tract irritation coughing
ICP-MS Tuning Solution PN: 5184-3566	Adverse symptoms may include the following: respiratory tract irritation coughing

Ingestion

: 250ml. Deionized Water for ICP-MS PN: G1820-60259	No specific data.
Nitric Acid Solution for ICP-MS PN: G1820-60258	Adverse symptoms may include the following: stomach pains
Tuning Sample No.10 ICP-MS PN: G1820-60410	Adverse symptoms may include the following: stomach pains
Tuning Sample No.9 for ICP-MS PN: G1820-65236	Adverse symptoms may include the following: stomach pains
Tuning Sample No.7 for ICP-MS PN: G1820-60372	Adverse symptoms may include the following: stomach pains
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Adverse symptoms may include the following: stomach pains
Tuning Sample No.3 for ICP-MS PN: G1820-60256	Adverse symptoms may include the following: stomach pains
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Adverse symptoms may include the following: stomach pains
ICP-MS Tuning Solution PN: 5184-3566	Adverse symptoms may include the following: stomach pains

2. Hazards identification

Skin	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258	No specific data. Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	ICP-MS Tuning Solution PN: 5184-3566	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Eyes	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258	No specific data. Adverse symptoms may include the following: pain watering redness
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Adverse symptoms may include the following: pain watering redness
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Adverse symptoms may include the following: pain watering redness
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Adverse symptoms may include the following: pain watering redness
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Adverse symptoms may include the following: pain watering redness
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Adverse symptoms may include the following: pain watering

2. Hazards identification

Medical conditions aggravated by over-exposure

<p>Tuning Sample No. 2 for ICP-MS PN: G1820-60254</p>	<p>redness Adverse symptoms may include the following: pain watering redness</p>
<p>ICP-MS Tuning Solution PN: 5184-3566</p>	<p>Adverse symptoms may include the following: pain watering redness</p>
<p>: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258</p>	<p>None known. Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No.10 ICP-MS PN: G1820-60410</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No.9 for ICP-MS PN: G1820-65236</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No.7 for ICP-MS PN: G1820-60372</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No. 6 for ICP-MS PN: G1820-60275</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No.3 for ICP-MS PN: G1820-60256</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>Tuning Sample No. 2 for ICP-MS PN: G1820-60254</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>
<p>ICP-MS Tuning Solution PN: 5184-3566</p>	<p>Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.</p>

See toxicological information (section 11)

3. Composition/information on ingredients

Name	CAS number	%
Nitric Acid Solution for ICP-MS PN: G1820-60258 Nitric acid	7697-37-2	1 - 5
Tuning Sample No.10 ICP-MS PN: G1820-60410 Nitric acid	7697-37-2	1 - 5
Tuning Sample No.9 for ICP-MS PN: G1820-65236 Nitric acid	7697-37-2	1 - 5
Tuning Sample No.7 for ICP-MS PN: G1820-60372 Nitric acid	7697-37-2	1 - 5
Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Nitric acid	7697-37-2	1 - 5
Tuning Sample No.3 for ICP-MS PN: G1820-60256 Nitric acid	7697-37-2	1 - 5

3. Composition/information on ingredients

Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Nitric acid	7697-37-2	1 - 5
ICP-MS Tuning Solution PN: 5184-3566 Nitric acid	7697-37-2	1 - 5

There are no additional 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.

4. First aid measures

Eye contact	<p>: 250ml. Deionized Water for ICP-MS PN: G1820-60259</p> <p>Nitric Acid Solution for ICP-MS PN: G1820-60258</p> <p>Tuning Sample No.10 ICP-MS PN: G1820-60410</p> <p>Tuning Sample No.9 for ICP-MS PN: G1820-65236</p> <p>Tuning Sample No.7 for ICP-MS PN: G1820-60372</p> <p>Tuning Sample No. 6 for ICP-MS PN: G1820-60275</p> <p>Tuning Sample No.3 for ICP-MS PN: G1820-60256</p> <p>Tuning Sample No. 2 for ICP-MS PN: G1820-60254</p> <p>ICP-MS Tuning Solution PN: 5184-3566</p>	<p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p> <p>Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.</p>
Skin contact	<p>: 250ml. Deionized Water for ICP-MS PN: G1820-60259</p> <p>Nitric Acid Solution for ICP-MS PN:</p>	<p>In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.</p> <p>In case of contact, immediately flush skin with</p>

4. First aid measures

G1820-60258	plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No.10 ICP-MS PN: G1820-60410	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No.9 for ICP-MS PN: G1820-65236	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No.7 for ICP-MS PN: G1820-60372	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No.3 for ICP-MS PN: G1820-60256	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
ICP-MS Tuning Solution PN: 5184-3566	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	
: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.
Nitric Acid Solution for ICP-MS PN: G1820-60258	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

4. First aid measures

Tuning Sample No.10 ICP-MS PN: G1820-60410	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Tuning Sample No.9 for ICP-MS PN: G1820-65236	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Tuning Sample No.7 for ICP-MS PN: G1820-60372	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Tuning Sample No.3 for ICP-MS PN: G1820-60256	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
ICP-MS Tuning Solution PN: 5184-3566	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion

: 250ml. Deionized Water for ICP- MS PN: G1820-60259	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Nitric Acid Solution for ICP-MS PN: G1820-60258	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Tuning Sample No.10 ICP-MS PN: G1820-60410	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Tuning Sample No.9 for ICP-MS PN: G1820-65236	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

4. First aid measures

		personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	ICP-MS Tuning Solution PN: 5184-3566	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first-aiders	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258	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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Tuning Sample No.7 for ICP-MS	No action shall be taken involving any personal

4. First aid measures

PN: G1820-60372

risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Tuning Sample No. 6 for ICP-MS
PN: G1820-60275

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Tuning Sample No.3 for ICP-MS
PN: G1820-60256

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Tuning Sample No. 2 for ICP-MS
PN: G1820-60254

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

ICP-MS Tuning Solution PN:
5184-3566

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

: 250ml. Deionized Water for ICP-MS
PN: G1820-60259

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Nitric Acid Solution for ICP-MS PN:
G1820-60258

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Tuning Sample No.10 ICP-MS PN:
G1820-60410

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Tuning Sample No.9 for ICP-MS
PN: G1820-65236

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

4. First aid measures

<p>Tuning Sample No.7 for ICP-MS PN: G1820-60372</p>	<p>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
<p>Tuning Sample No. 6 for ICP-MS PN: G1820-60275</p>	<p>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
<p>Tuning Sample No.3 for ICP-MS PN: G1820-60256</p>	<p>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
<p>Tuning Sample No. 2 for ICP-MS PN: G1820-60254</p>	<p>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
<p>ICP-MS Tuning Solution PN: 5184-3566</p>	<p>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>

5. Fire-fighting measures

<p>Flammability of the product :</p> <p>250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566</p>	<p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p>
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Extinguishing media

<p>Suitable :</p> <p>250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN:</p>	<p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p> <p>Use an extinguishing agent suitable for the surrounding fire.</p>
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5. Fire-fighting measures

Not suitable	5184-3566 : 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	surrounding fire. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known.
Special exposure hazards	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	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. 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.
Hazardous thermal decomposition products	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254	No specific data. Decomposition products may include the following materials: nitrogen oxides Decomposition products may include the following materials: nitrogen oxides

5. Fire-fighting measures

ICP-MS Tuning Solution PN: 5184-3566
 Decomposition products may include the following materials:
 nitrogen oxides
 nitrogen oxides

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

6. Accidental release measures

<p>Personal precautions</p>	<p>: 250ml. Deionized Water for ICP-MS PN: G1820-60259</p>	<p>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 (see section 8).</p>
	<p>Nitric Acid Solution for ICP-MS PN: G1820-60258</p>	<p>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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).</p>
	<p>Tuning Sample No.10 ICP-MS PN: G1820-60410</p>	<p>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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).</p>
	<p>Tuning Sample No.9 for ICP-MS PN: G1820-65236</p>	<p>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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).</p>
	<p>Tuning Sample No.7 for ICP-MS PN: G1820-60372</p>	<p>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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).</p>
	<p>Tuning Sample No. 6 for ICP-MS PN: G1820-60275</p>	<p>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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when</p>

6. Accidental release measures

Tuning Sample No.3 for ICP-MS
PN: G1820-60256

ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Tuning Sample No. 2 for ICP-MS
PN: G1820-60254

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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

ICP-MS Tuning Solution PN:
5184-3566

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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : 250ml. Deionized Water for ICP-MS
PN: G1820-60259

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).

Nitric Acid Solution for ICP-MS PN:
G1820-60258

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).

Tuning Sample No.10 ICP-MS PN:
G1820-60410

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).

Tuning Sample No.9 for ICP-MS
PN: G1820-65236

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).

Tuning Sample No.7 for ICP-MS
PN: G1820-60372

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).

Tuning Sample No. 6 for ICP-MS
PN: G1820-60275

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. Accidental release measures

	Tuning Sample No.3 for ICP-MS PN: G1820-60256	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).
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	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).
	ICP-MS Tuning Solution PN: 5184-3566	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Stop leak if without risk. Move containers from spill area. 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.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Stop leak if without risk. Move containers from spill area. 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.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Stop leak if without risk. Move containers from spill area. 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.
	ICP-MS Tuning Solution PN: 5184-3566	Stop leak if without risk. Move containers from spill area. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of

6. Accidental release measures

via a licensed waste disposal contractor.

7. Handling and storage

Handling

: 250ml. Deionized Water for ICP-MS PN: G1820-60259

Put on appropriate personal protective equipment (see section 8). 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.

Nitric Acid Solution for ICP-MS PN: G1820-60258

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Tuning Sample No.10 ICP-MS PN: G1820-60410

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Tuning Sample No.9 for ICP-MS PN: G1820-65236

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Tuning Sample No.7 for ICP-MS PN: G1820-60372

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do

7. Handling and storage

Tuning Sample No. 6 for ICP-MS
PN: G1820-60275

not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Tuning Sample No.3 for ICP-MS
PN: G1820-60256

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Tuning Sample No. 2 for ICP-MS
PN: G1820-60254

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

ICP-MS Tuning Solution PN:
5184-3566

Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible

7. Handling and storage

material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

: 250ml. Deionized Water for ICP-MS PN: G1820-60259

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.

Nitric Acid Solution for ICP-MS PN: G1820-60258

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. Separate from alkalis. 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.

Tuning Sample No.10 ICP-MS PN: G1820-60410

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.

Tuning Sample No.9 for ICP-MS PN: G1820-65236

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.

Tuning Sample No.7 for ICP-MS PN: G1820-60372

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

7. Handling and storage

Tuning Sample No. 6 for ICP-MS
PN: G1820-60275

contamination.
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.

Tuning Sample No.3 for ICP-MS
PN: G1820-60256

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.

Tuning Sample No. 2 for ICP-MS
PN: G1820-60254

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.

ICP-MS Tuning Solution PN:
5184-3566

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. Separate from alkalis. 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.

8. Exposure controls/personal protection

Ingredient	Exposure limits
<p>Nitric Acid Solution for ICP-MS PN: G1820-60258 Nitric acid</p>	<p>ACGIH TLV (United States, 1/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5.2 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s). NIOSH REL (United States, 6/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s).</p>

8. Exposure controls/personal protection

Tuning Sample No.10 ICP-MS PN: G1820-60410

Nitric acid

TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).
OSHA PEL (United States, 11/2006).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).
OSHA PEL 1989 (United States, 3/1989).
 STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5.2 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

Tuning Sample No.9 for ICP-MS PN: G1820-65236

Nitric acid

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5.2 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

Tuning Sample No.7 for ICP-MS PN: G1820-60372

Nitric acid

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5.2 mg/m³ 8 hour(s).

8. Exposure controls/personal protection

Tuning Sample No. 6 for ICP-MS PN: G1820-60275

Nitric acid

TWA: 2 ppm 8 hour(s).
NIOSH REL (United States, 6/2009).
 STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).
OSHA PEL (United States, 11/2006).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).
OSHA PEL 1989 (United States, 3/1989).
 STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5.2 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

Tuning Sample No.3 for ICP-MS PN: G1820-60256

Nitric acid

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5.2 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 10 hour(s).
 TWA: 2 ppm 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

STEL: 10 mg/m³ 15 minute(s).
 STEL: 4 ppm 15 minute(s).
 TWA: 5 mg/m³ 8 hour(s).
 TWA: 2 ppm 8 hour(s).

Tuning Sample No. 2 for ICP-MS PN: G1820-60254

8. Exposure controls/personal protection

Nitric acid	<p>ACGIH TLV (United States, 1/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5.2 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5 mg/m³ 10 hour(s). TWA: 2 ppm 10 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 5 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p>
<p>ICP-MS Tuning Solution PN: 5184-3566</p> <p>Nitric acid</p>	<p>ACGIH TLV (United States, 1/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5.2 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5 mg/m³ 10 hour(s). TWA: 2 ppm 10 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 5 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). STEL: 10 mg/m³ 15 minute(s). STEL: 4 ppm 15 minute(s). TWA: 5 mg/m³ 8 hour(s). TWA: 2 ppm 8 hour(s).</p>

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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.
- Personal protection**
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

8. Exposure controls/personal protection

- Hands** : 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.
- Eyes** : 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 or dusts.
- Skin** : 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.
- 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.
- Other protection** : Not available.

9. Physical and chemical properties

- Physical state** : 250ml. Deionized Water for ICP-MS PN: G1820-60259 Liquid.
 Nitric Acid Solution for ICP-MS PN: G1820-60258 Liquid.
 Tuning Sample No.10 ICP-MS PN: G1820-60410 Liquid.
 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Liquid.
 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Liquid.
 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Liquid.
 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Liquid.
 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Liquid.
 ICP-MS Tuning Solution PN: 5184-3566 Liquid.
- Flash point** : 250ml. Deionized Water for ICP-MS PN: G1820-60259 Not available.
 Nitric Acid Solution for ICP-MS PN: G1820-60258 Not available.
 Tuning Sample No.10 ICP-MS PN: G1820-60410 Not available.
 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Not available.
 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Not available.
 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Not available.
 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Not available.
 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Not available.
 ICP-MS Tuning Solution PN: 5184-3566 Not available.

9. Physical and chemical properties

Auto-ignition temperature	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Not available.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Not available.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Not available.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Not available.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Not available.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Not available.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
	ICP-MS Tuning Solution PN: 5184-3566	Not available.
	Flammable limits	: 250ml. Deionized Water for ICP-MS PN: G1820-60259
Nitric Acid Solution for ICP-MS PN: G1820-60258		Not available.
Tuning Sample No.10 ICP-MS PN: G1820-60410		Not available.
Tuning Sample No.9 for ICP-MS PN: G1820-65236		Not available.
Tuning Sample No.7 for ICP-MS PN: G1820-60372		Not available.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275		Not available.
Tuning Sample No.3 for ICP-MS PN: G1820-60256		Not available.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254		Not available.
ICP-MS Tuning Solution PN: 5184-3566		Not available.
Color		: 250ml. Deionized Water for ICP-MS PN: G1820-60259
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Colorless to light yellow.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Colorless to pale yellow.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Colorless to pale yellow liquid
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Colorless to light yellow.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Colorless to pale yellow liquid
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Colorless to pale yellow liquid
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Colorless to pale yellow liquid
	ICP-MS Tuning Solution PN: 5184-3566	Colorless to light yellow.

9. Physical and chemical properties

Odor	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless. Odorless.
pH	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Not available. <2 [Conc. (% w/w): 5%] Not available. Not available. Not available. Not available. Not available. Not available. Not available. 1
Boiling/condensation point	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	100°C (212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F) >100°C (>212°F)

9. Physical and chemical properties

Melting/freezing point	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	0°C (32°F)
	Nitric Acid Solution for ICP-MS PN: G1820-60258	<4°C (<39.2°F)
	Tuning Sample No.10 ICP-MS PN: G1820-60410	<4°C (<39.2°F)
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	<4°C (<39.2°F)
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	<4°C (<39.2°F)
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	<4°C (<39.2°F)
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	<4°C (<39.2°F)
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	<4°C (<39.2°F)
	ICP-MS Tuning Solution PN: 5184-3566	<4°C (<39.2°F)
	Specific gravity	: 250ml. Deionized Water for ICP-MS PN: G1820-60259
Nitric Acid Solution for ICP-MS PN: G1820-60258		1.004
Tuning Sample No.10 ICP-MS PN: G1820-60410		Not available.
Tuning Sample No.9 for ICP-MS PN: G1820-65236		Not available.
Tuning Sample No.7 for ICP-MS PN: G1820-60372		Not available.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275		Not available.
Tuning Sample No.3 for ICP-MS PN: G1820-60256		Not available.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254		Not available.
ICP-MS Tuning Solution PN: 5184-3566		1.008
Vapor pressure		: 250ml. Deionized Water for ICP-MS PN: G1820-60259
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Not available.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Not available.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Not available.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Not available.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Not available.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
	ICP-MS Tuning Solution PN: 5184-3566	Not available.

9. Physical and chemical properties

Vapor density	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
Volatility	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
Odor threshold	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.

9. Physical and chemical properties

Evaporation rate	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Not available.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	>1 (butyl acetate = 1)
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Not available.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	<1 (butyl acetate = 1)
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Not available.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Not available.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
	ICP-MS Tuning Solution PN: 5184-3566	>1 (butyl acetate = 1)
	Viscosity	: 250ml. Deionized Water for ICP-MS PN: G1820-60259
Nitric Acid Solution for ICP-MS PN: G1820-60258		Not available.
Tuning Sample No.10 ICP-MS PN: G1820-60410		Not available.
Tuning Sample No.9 for ICP-MS PN: G1820-65236		Not available.
Tuning Sample No.7 for ICP-MS PN: G1820-60372		Not available.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275		Not available.
Tuning Sample No.3 for ICP-MS PN: G1820-60256		Not available.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254		Not available.
ICP-MS Tuning Solution PN: 5184-3566		Not available.
Solubility		: 250ml. Deionized Water for ICP-MS PN: G1820-60259
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Soluble in the following materials: cold water and hot water.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Soluble in the following materials: cold water and hot water.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Soluble in the following materials: cold water and hot water.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Soluble in the following materials: cold water and hot water.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Soluble in the following materials: cold water and hot water.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Soluble in the following materials: cold water and hot water.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Soluble in the following materials: cold water and hot water.
	ICP-MS Tuning Solution PN: 5184-3566	Soluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability	: The product is stable.	
Conditions to avoid	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	No specific data.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	No specific data.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	No specific data.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	No specific data.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	No specific data.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	No specific data.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	No specific data.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	No specific data.
	ICP-MS Tuning Solution PN: 5184-3566	No specific data.
Materials to avoid	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Reactive or incompatible with the following materials: oxidizing materials, reducing materials, metals, acids and alkalis.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Highly reactive or incompatible with the following materials: combustible materials and metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Highly reactive or incompatible with the following materials: metals.

10. Stability and reactivity

	PN: G1820-60256	materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, acids and alkalis. Slightly reactive or incompatible with the following materials: organic materials.
	ICP-MS Tuning Solution PN: 5184-3566	Reactive or incompatible with the following materials: reducing materials, combustible materials, metals and alkalis. Slightly reactive or incompatible with the following materials: oxidizing materials and organic materials.
Hazardous decomposition products	: 250ml. Deionized Water for ICP-MS PN: G1820-60259	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	ICP-MS Tuning Solution PN: 5184-3566	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	

11. Toxicological information

Acute toxicity

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitizer

11. Toxicological information

Conclusion/Summary	: Not available.
<u>Carcinogenicity</u>	
Conclusion/Summary	: Not available.
<u>Mutagenicity</u>	
Conclusion/Summary	: Not available.
<u>Teratogenicity</u>	
Conclusion/Summary	: Not available.
<u>Reproductive toxicity</u>	
Conclusion/Summary	: Not available.
Other adverse symptoms	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Not available. Nitric Acid Solution for ICP-MS PN: G1820-60258 Not available. Tuning Sample No.10 ICP-MS PN: G1820-60410 Not available. Tuning Sample No.9 for ICP-MS PN: G1820-65236 Not available. Tuning Sample No.7 for ICP-MS PN: G1820-60372 Not available. Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Not available. Tuning Sample No.3 for ICP-MS PN: G1820-60256 Not available. Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Not available. ICP-MS Tuning Solution PN: 5184-3566 Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Nitric Acid Solution for ICP-MS PN: G1820-60258 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No.10 ICP-MS PN: G1820-60410 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No.9 for ICP-MS PN: G1820-65236 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No.7 for ICP-MS PN: G1820-60372 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No. 6 for ICP-MS PN: G1820-60275			

12. Ecological information

Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No.3 for ICP-MS PN: G1820-60256 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
ICP-MS Tuning Solution PN: 5184-3566 Nitric acid	Acute LC50 180000 ug/L Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

Octanol/water partition coefficient	: Water	Not available.
	Nitric Acid Solution for ICP-MS PN: G1820-60258	Not available.
	Tuning Sample No.10 ICP-MS PN: G1820-60410	Not available.
	Tuning Sample No.9 for ICP-MS PN: G1820-65236	Not available.
	Tuning Sample No.7 for ICP-MS PN: G1820-60372	Not available.
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275	Not available.
	Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
	ICP-MS Tuning Solution PN: 5184-3566	Not available.

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

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : 250ml. Deionized Water for ICP-MS PN: G1820-60259 Not available.
 Nitric Acid Solution for ICP-MS PN: G1820-60258 D002
 Tuning Sample No.10 ICP-MS PN: G1820-60410 Not available.
 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Not available.
 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Not available.
 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Not available.

13. Disposal considerations

Tuning Sample No.3 for ICP-MS PN: G1820-60256	Not available.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	Not available.
ICP-MS Tuning Solution PN: 5184-3566	Not available.

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.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid, solution)	8	III		<p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 5 to 5 L</p> <p>Cargo aircraft Quantity limitation: 60 to 60 L</p> <p>Special provisions IB3, T7, TP1, TP28</p> <p>Remarks Requires Dangerous Goods BOL</p>
IMDG	UN3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, solution)	8	III		<p>Emergency schedules (EmS) F-A, S-B</p>
IATA	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid, solution)	8	III		<p>Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 818</p> <p>Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 820</p> <p>Limited Quantities - Passenger Aircraft</p>

14. Transport information

						Quantity limitation: 1 L Packaging instructions: Y818 Remarks Requires Shipper's Declaration of Dangerous Goods
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PG* : Packing group

15. Regulatory information

HCS Classification	: 250ml. Deionized Water for ICP-MS PN: G1820-60259 Nitric Acid Solution for ICP-MS PN: G1820-60258 Tuning Sample No.10 ICP-MS PN: G1820-60410 Tuning Sample No.9 for ICP-MS PN: G1820-65236 Tuning Sample No.7 for ICP-MS PN: G1820-60372 Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Tuning Sample No.3 for ICP-MS PN: G1820-60256 Tuning Sample No. 2 for ICP-MS PN: G1820-60254 ICP-MS Tuning Solution PN: 5184-3566	Not regulated. Corrosive material Target organ effects Corrosive material Target organ effects
U.S. Federal regulations	: TSCA 8(a) PAIR: Indium TSCA 8(a) IUR: Water United States inventory (TSCA 8b): All components are listed or exempted. TSCA 8(d) H and S data reporting: Indium: 2004 SARA 302/304/311/312 extremely hazardous substances: Nitric acid SARA 302/304 emergency planning and notification: Nitric acid SARA 302/304/311/312 hazardous chemicals: Nitric acid SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Nitric acid: Fire hazard, reactive, Immediate (acute) health hazard Clean Water Act (CWA) 307: Beryllium; Thallium Clean Water Act (CWA) 311: Nitric acid Clean Air Act (CAA) 112 accidental release prevention: Nitric acid Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: Nitric acid	
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	

15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Nitric Acid Solution for ICP-MS PN: G1820-60258 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.10 ICP-MS PN: G1820-60410 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.9 for ICP-MS PN: G1820-65236 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.7 for ICP-MS PN: G1820-60372 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.3 for ICP-MS PN: G1820-60256 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Nitric acid	7697-37-2	1 - 5
	ICP-MS Tuning Solution PN: 5184-3566 Nitric acid	7697-37-2	1 - 5
Supplier notification	Nitric Acid Solution for ICP-MS PN: G1820-60258 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.10 ICP-MS PN: G1820-60410 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.9 for ICP-MS PN: G1820-65236 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.7 for ICP-MS PN: G1820-60372 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No.3 for ICP-MS PN: G1820-		

15. Regulatory information

	60256 Nitric acid	7697-37-2	1 - 5
	Tuning Sample No. 2 for ICP-MS PN: G1820-60254 Nitric acid	7697-37-2	1 - 5
	ICP-MS Tuning Solution PN: 5184-3566 Nitric acid	7697-37-2	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: NITRIC ACID

New York : The following components are listed: Nitric acid

New Jersey : The following components are listed: NITRIC ACID

Pennsylvania : The following components are listed: NITRIC ACID

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Tuning Sample No.9 for ICP-MS PN: G1820-65236 Beryllium	Yes.	No.	Yes.	No.
Tuning Sample No. 6 for ICP-MS PN: G1820-60275 Cobalt	Yes.	No.	No.	No.
ICP-MS Tuning Solution PN: 5184-3566 Cobalt	Yes.	No.	No.	No.

16. Other information

<p>Label requirements :</p> <p>250ml. Deionized Water for ICP-MS PN: G1820-60259</p> <p>Nitric Acid Solution for ICP-MS PN: G1820-60258</p> <p>Tuning Sample No.10 ICP-MS PN: G1820-60410</p> <p>Tuning Sample No.9 for ICP-MS PN: G1820-65236</p> <p>Tuning Sample No.7 for ICP-MS PN: G1820-60372</p>	<p>NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.</p> <p>CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.</p> <p>CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.</p> <p>CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.</p> <p>CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.</p>
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16. Other information

Tuning Sample No. 6 for ICP-MS PN: G1820-60275	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No.3 for ICP-MS PN: G1820-60256	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Tuning Sample No. 2 for ICP-MS PN: G1820-60254	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
ICP-MS Tuning Solution PN: 5184-3566	CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Date of issue : 02/5/2010
Date of previous issue : No previous validation.
Version : 1

✔ Indicates information that has changed from previously issued version.

Notice to reader

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