Agilent Technologies

28.06.2018 **Kit components**

Product code	Description
8500-6940(Kit)	**Multi-Element Calibration Standard-2A**

Components:

8500-6940	Multi-element Calibration Standard 2A
8500-6940-HG	Multi Element Calibration Standard 2A - HG

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **English additional compounds**
· **1.1 Product identifier**

· **Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940**

· **Part Number:** 8500-6940
· **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
· **Application of the substance / the mixture**
Reagents and Standards for Analytical Chemistry Laboratory Use
-2 Bottle Set
A 100 mL Solution

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany

· **Further information obtainable from:** product safety department
· **1.4 Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**


GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**
nitric acid
· **Hazard statements**
Causes severe skin burns and eye damage.
· **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7697-37-2 EINECS: 231-714-2	nitric acid	Ox. Liq. 2, H272; Skin Corr. 1A, H314	5.0%

· **CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION**

CAS: 7429-90-5 EINECS: 231-072-3	aluminium Pyr. Sol. 1, H250; Water-react. 2, H261	0.001%
CAS: 7439-89-6 EINECS: 231-096-4	iron Acute Tox. 2, H300	0.001%
CAS: 7439-92-1 EINECS: 231-100-4	Lead from Lead Oxide Repr. 1A, H360Df; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332	0.001%
CAS: 7439-93-2 EINECS: 209-062-5	lithium Acute Tox. 4, H302; Eye Irrit. 2, H319	0.001%
CAS: 7439-95-4 EINECS: 231-104-6	magnesium Pyr. Sol. 1, H250; Water-react. 1, H260	0.001%
CAS: 7439-96-5 EINECS: 231-105-1	manganese	0.001%
CAS: 7440-02-0 EINECS: 231-111-4	nickel Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317	0.001%
CAS: 7440-09-7 EINECS: 231-818-8	potassium Ox. Sol. 2, H272	0.001%
CAS: 7440-17-7 EINECS: 236-060-1	Rubidium from Rubidium nitrate Ox. Sol. 1, H271	0.001%
CAS: 7440-22-4 EINECS: 231-131-3	silver	0.001%
CAS: 7440-23-5 EINECS: 207-838-8	Sodium from Sodium carbonate Eye Irrit. 2, H319	0.001%
CAS: 7440-24-6 EINECS: 216-643-7	strontium	0.001%
CAS: 10102-45-1 EINECS: 233-273-1	thallium nitrate Acute Tox. 2, H300; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic Chronic 2, H411	0.001%
CAS: 7440-38-2 EINECS: 231-148-6	arsenic Acute Tox. 3, H301; Acute Tox. 3, H331; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.001%
CAS: 7440-39-3 EINECS: 208-167-3	Barium from Barium carbonate Acute Tox. 4, H302	0.001%
CAS: 7440-41-7	beryllium Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 1, H330; Carc. 1A, H350	0.001%
CAS: 7440-43-9 EINECS: 231-152-8	cadmium (non-pyrophoric) Acute Tox. 3, H301; Acute Tox. 2, H330; Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361fd; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.001%
CAS: 7440-46-2 EINECS: 232-146-8	Cesium from Cesium nitrate Ox. Sol. 3, H272	0.001%
CAS: 7440-47-3	chromium Ox. Liq. 2, H272; Skin Irrit. 2, H315; Eye Irrit. 2, H319	0.001%
CAS: 7440-48-4 EINECS: 231-158-0	cobalt Resp. Sens. 1, H334; Skin Sens. 1, H317; Aquatic Chronic 4, H413	0.001%
CAS: 7440-50-8 EINECS: 231-159-6	copper	0.001%
CAS: 7440-55-3 EINECS: 231-163-8	gallium	0.001%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 2)

CAS: 7440-61-1 EINECS: 233-266-3	uranium Acute Tox. 2, H300; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic Chronic 2, H411	0.001%
CAS: 7440-62-2 EINECS: 232-261-3	Vanadium from Ammonium trioxovanadate Acute Tox. 3, H301; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.001%
CAS: 7440-66-6 EINECS: 231-175-3	zinc powder -zinc dust (stabilized) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.001%
CAS: 7440-70-2 EINECS: 207-439-9	calcium Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335	0.001%
CAS: 7782-49-2 EINECS: 231-957-4	selenium Acute Tox. 3, H301; Acute Tox. 3, H331; STOT RE 2, H373; Aquatic Chronic 4, H413	0.001%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	94.973%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Do not give anything to eat or drink - Do not induce vomitting
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 3)

· ***Information about storage in one common storage facility:*** *Not required.*
· ***Further information about storage conditions:*** *Keep container tightly sealed.*
· ***7.3 Specific end use(s)*** *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

· ***Additional information about design of technical facilities:*** *No further data; see item 7.*

· ***8.1 Control parameters***

· ***Ingredients with limit values that require monitoring at the workplace:***	
7697-37-2 nitric acid	
WEL	*Short-term value: 2.6 mg/m³, 1 ppm*

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· ***Respiratory protection:***
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· ***Protection of hands:***

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· ***Material of gloves***
Nitrile Glove
Thickness: ≥0.11 mm
Breakthrough time: > 480 minutes
· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***Eye protection:***

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	*Liquid*
Colour:	*Colourless*
· ***Odour:***	*Odourless*
· ***Odour threshold:***	*Not applicable.*
· ***pH-value:***	*<1*
· ***Change in condition***	
Melting point/freezing point:	*0°C (32°F)*

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 4)

Initial boiling point and boiling range:	100°C (212°F)
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not applicable.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not applicable.
Upper:	Not applicable.
· **Vapour pressure at 20 °C:**	23 hPa
· **Density:**	1.0 g/mL @ 20°C
· **Relative density**	Not applicable.
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Miscible
· **Partition coefficient: n-octanol/water:**	Not applicable.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **Solvent content:**	
Water:	95.0 %
VOC (EC)	0.00 %
Solids content:	0.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 5)

· ***Aspiration hazard*** *Based on available data, the classification criteria are not met.*

SECTION 12: Ecological information

· ***12.1 Toxicity***
· ***Aquatic toxicity:*** *No further relevant information available.*
· ***12.2 Persistence and degradability*** *No further relevant information available.*
· ***12.3 Bioaccumulative potential*** *No further relevant information available.*
· ***12.4 Mobility in soil*** *No further relevant information available.*
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*
· ***12.6 Other adverse effects*** *No further relevant information available.*

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation*** *Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

· ***Uncleaned packaging:***
· ***Recommendation:*** *Disposal must be made according to official regulations.*

SECTION 14: Transport information

· ***14.1 UN-Number***	
· ***ADR, IMDG, IATA***	*UN3264*
· ***14.2 UN proper shipping name***	
· ***ADR***	*3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)*
· ***IMDG, IATA***	*CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)*
· ***14.3 Transport hazard class(es)***	
· ***ADR, IMDG, IATA***	
· ***Class***	*8 Corrosive substances.*
· ***Label***	*8*
· ***14.4 Packing group***	
· ***ADR, IMDG, IATA***	*III*
· ***14.5 Environmental hazards:***	*Not applicable.*
· ***14.6 Special precautions for user***	*Warning: Corrosive substances.*
· ***Danger code (Kemler):***	*80*
· ***EMS Number:***	*F-A,S-B*
· ***Segregation groups***	*Acids*
· ***Stowage Category***	*A*

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 6)

· **Stowage Code**	SW2 Clear of living quarters.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **Tunnel restriction code**	E
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION), 8, III

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

· **Relevant phrases**
H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H261 In contact with water releases flammable gases.
H271 May cause fire or explosion; strong oxidiser.
H272 May intensify fire; oxidiser.
H300 Fatal if swallowed.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H351 Suspected of causing cancer.
H360Df May damage the unborn child. Suspected of damaging fertility.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi-element Calibration Standard 2A, Part Number 8500-6940

(Contd. of page 7)

H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

· ***Department issuing SDS:*** *product safety department*
· ***Contact:***
Agilent Technologies Manufacturing GmbH & Co. KG
0800 603 1000
pdl-msds_author@agilent.com
· ***Abbreviations and acronyms:***
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Ox. Liq. 2: Oxidizing liquids – Category 2
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **English additional compounds**
· **1.1 Product identifier**

· **Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG**

· **Part Number:** 8500-6940-HG
· **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
· **Application of the substance / the mixture**
Reagents and Standards for Analytical Chemistry Laboratory Use
-2 Bottle Set
A 100 mL Solution

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany

· **Further information obtainable from:** product safety department
· **1.4 Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**


GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**
nitric acid
· **Hazard statements**
Causes severe skin burns and eye damage.
· **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7697-37-2 EINECS: 231-714-2	nitric acid	Ox. Liq. 2, H272; Skin Corr. 1A, H314	5.0%

· **CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION**

CAS: 7439-97-6 EINECS: 231-106-7	mercury Acute Tox. 2, H330; Repr. 1B, H360D; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.001%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	94.999%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Do not give anything to eat or drink - Do not induce vomitting
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG

(Contd. of page 2)

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
7697-37-2 nitric acid	
WEL	Short-term value: 2.6 mg/m³, 1 ppm

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
Nitrile Glove
Thickness: ≥ 0.11 mm
Breakthrough time: > 480 minutes
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Liquid
Colour:	Colourless
· **Odour:**	Odourless
· **Odour threshold:**	Not applicable.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG

(Contd. of page 3)

· **pH-value:**	<1
· **Change in condition**	
Melting point/freezing point:	0°C (32°F)
Initial boiling point and boiling range:	100°C (212°F)
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not applicable.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not applicable.
Upper:	Not applicable.
· **Vapour pressure at 20 °C:**	23 hPa
· **Density:**	1.0 g/mL @ 20°C
· **Relative density**	Not applicable.
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Miscible
· **Partition coefficient: n-octanol/water:**	Not applicable.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **Solvent content:**	
Water:	95.0 %
VOC (EC)	0.00 %
Solids content:	0.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 *Revision: 28.06.2018*

Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG

(Contd. of page 4)

· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN3264
· **14.2 UN proper shipping name**	
· **ADR**	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)
· **IMDG, IATA**	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	III
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Danger code (Kemler):**	80
· **EMS Number:**	F-A,S-B

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2018 Revision: 28.06.2018

Product Name: Multi Element Calibration Standard 2A - HG, Part Number 8500-6940-HG

(Contd. of page 5)

· **Segregation groups**	Acids
· **Stowage Category**	A
· **Stowage Code**	SW2 Clear of living quarters.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **Tunnel restriction code**	E
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION), 8, III

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

· **Relevant phrases**
H272 May intensify fire; oxidiser.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
H360D May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** product safety department
· **Contact:**
Agilent Technologies Manufacturing GmbH & Co. KG
0800 603 1000
pdl-msds_author@agilent.com
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Ox. Liq. 2: Oxidizing liquids – Category 2
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1