



09/09/2015

Kit components

Product code	Description
5184-3565(Kit)	ICP-MS Checkout Solutions for 7500a/i/c

Components:

5184-3566	Tuning Solution
G1820-60258	Wash-Nitric Acid Blank
G1820-60259	Wash-Water Blank
G1820-60372	Dual Mode 1 Solution
G1820-60410	Dual Mode 2 Solution

**Safety data sheet
according to NOHSC 2003**

Printing date 09.09.2015

Revision: 09.09.2015

Hazardous according to criteria of Australian Safety and Compensation Council

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

- English additional compounds
- Product identifier
- Product Name: Tuning Solution, Part Number 5184-3566
- Part Number: 5184-3566
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
Analytical Chemistry
2 x 500 mL Solution
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Agilent Technologies Australia Pty Ltd
679 Springvale Road
Muggrave
Victoria 3170, Australia
- Further information obtainable from: product safety department
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazards identification

- Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

- Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- Hazard pictograms



GHS07

- Signal word Warning
- Hazard statements
Causes skin irritation.
Causes serious eye irritation.
- Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

AU

(Contd. on page 2)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

(Contd. of page 1)

3 Composition/information on ingredients

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

Dangerous components:

7697-37-2	nitric acid		2.0%
-----------	-------------	--	------

CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION

7439-93-2	Lithium from Lithium carbonate		<0.0001%
7440-28-0	Thallium from Thallium nitrate		<0.0001%
7440-45-1	Cerium from Cerium(III) nitrate hexahydrate		<0.0001%
7440-48-4	cobalt		<0.0001%
7440-65-5	Yttrium from Yttrium oxide		<0.0001%
7732-18-5	water, distilled, conductivity or of similar purity		98.0%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling:**
- **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 NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

(Contd. of page 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.*
- *Specific end use(s) No further relevant information available.*

8 Exposure controls/personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:**

7697-37-2 nitric acid

NES	Short-term value: 10 mg/m ³ , 4 ppm
	Long-term value: 5.2 mg/m ³ , 2 ppm

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

· **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**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Colour:	Colourless
Odour:	Odourless

(Contd. on page 4)



Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

(Contd. of page 3)

· Odour threshold:	<i>Not applicable.</i>
· pH-value:	<i><1</i>
· Change in condition	
Melting point/Melting range:	<i>0 °C (32°F)</i>
Boiling point/Boiling range:	<i>100 °C (212°F)</i>
· Flash point:	<i>Not applicable.</i>
· Flammability (solid, gaseous):	<i>Not applicable.</i>
· Ignition temperature:	
Decomposition temperature:	<i>Not applicable.</i>
· Self-igniting:	<i>Product is not selfigniting.</i>
· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
· Explosion limits:	
Lower:	<i>Not applicable.</i>
Upper:	<i>Not applicable.</i>
· Vapour pressure at 20 °C:	<i>23 hPa</i>
· Density:	<i>1.0 g/mL @ 20 °C</i>
· Relative density	<i>Not applicable.</i>
· Vapour density	<i>Not applicable.</i>
· Evaporation rate	<i>Not applicable.</i>
· Solubility in / Miscibility with water:	<i>Miscible</i>
· Partition coefficient (n-octanol/water):	<i>Not applicable.</i>
· Viscosity:	
Dynamic:	<i>Not applicable.</i>
Kinematic:	<i>Not applicable.</i>
· Solvent content:	
Organic solvents:	<i>0,0 %</i>
Water:	<i>98,0 %</i>
VOC (EC)	<i>0,00 %</i>
· Other information	<i>No further relevant information available.</i>

10 Stability and reactivity

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** *Irritant to skin and mucous membranes.*
- **Serious eye damage/irritation** *Irritating effect.*
- **Respiratory or skin sensitisation** *No sensitising effects known.*
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

(Contd. on page 5)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

Irritant

(Contd. of page 4)


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **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.

14 Transport information

- | | |
|---|---|
| · UN-Number | UN3264 |
| · ADG, IMDG, IATA | |
| · UN proper shipping name | 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION) |
| · ADG | |
| · IMDG, IATA | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION) |
| · Transport hazard class(es) | |
| · ADG, IMDG, IATA | |
|  | |
| · Class | 8 Corrosive substances. |
| · Label | 8 |
| · Packing group | III |
| · ADG, IMDG, IATA | |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Warning: Corrosive substances. |
| · Danger code (Kemler): | 80 |
| · EMS Number: | F-A,S-B |
| · Segregation groups | Acids |
| · Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

(Contd. on page 6)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

(Contd. of page 5)

· Transport/Additional information:
· ADG
· Limited quantities (LQ)
· Excepted quantities (EQ)

5L

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)
· Excepted quantities (EQ)

5L

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, (E)

15 Regulatory information
· Safety, health and environmental regulations/legislation specific for the substance or mixture
· Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

7697-37-2	nitric acid	S5, S6
7439-93-2	Lithium from Lithium carbonate	S2, S4
7440-28-0	Thallium from Thallium nitrate	S7
7440-48-4	cobalt	S4

· GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms


GHS07

· Signal word Warning

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

AU

(Contd. on page 7)



**Safety data sheet
according to NOHSC 2003**

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Tuning Solution, Part Number 5184-3566

(Contd. of page 6)

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.

· **Department issuing SDS:** product safety department

· **Contact:**

Agilent Technologies Australia Pty Ltd

1800 802 402

· **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

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. 3: Oxidising Liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Hazardous according to criteria of Australian Safety and Compensation Council

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

- English additional compounds
- Product identifier
- Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258
- Part Number: G1820-60258
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
Analytical Chemistry
A 250 mL Solution
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Agilent Technologies Australia Pty Ltd
679 Springvale Road
Muggrave
Victoria 3170, Australia
- Further information obtainable from: product safety department
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazards identification

- Classification of the substance or mixture



corrosion

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

- Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- 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.
Do not breathe dust/fume/gas/mist/vapours/spray.
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.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.

(Contd. on page 2)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 1)

· **vPvB:** Not applicable.

3 Composition/information on ingredients

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

- **Dangerous components:**

7697-37-2	nitric acid	 Ox. Liq. 3, H272;  Skin Corr. 1A, H314	5.0%
-----------	-------------	--	------

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

7732-18-5	water, distilled, conductivity or of similar purity	95.0%
-----------	---	-------

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **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:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Dilute with plenty of water.
- **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.
- **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.

7 Handling and storage

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

(Contd. on page 3)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 2)

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

8 Exposure controls/personal protection

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

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

7697-37-2 nitric acid

NES	Short-term value: 10 mg/m ³ , 4 ppm
	Long-term value: 5.2 mg/m ³ , 2 ppm

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

- **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**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

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

- **pH-value:** <1

(Contd. on page 4)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 3)

· Change in condition	
Melting point/Melting range:	0 °C (32°F)
Boiling point/Boiling range:	100 °C (212°F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not applicable.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not applicable.
Upper:	Not applicable.
· Vapour pressure:	Not determined.
· 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:	
Organic solvents:	0.0 %
Water:	95.0 %
VOC (EC)	0.00 %
· Other information	No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive

(Contd. on page 5)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 4)

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Generally not hazardous for water
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **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.

14 Transport information

· UN-Number · ADG, IMDG, IATA	UN3264
· UN proper shipping name · ADG · IMDG, IATA	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)
· Transport hazard class(es) · ADG, IMDG, IATA	
	
· Class · Label	8 Corrosive substances. 8
· Packing group · ADG, IMDG, IATA	III
· Environmental hazards:	Not applicable.
· Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups	Warning: Corrosive substances. 80 F-A, S-B Acids
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

(Contd. on page 6)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 5)

· Transport/Additional information:

· ADG	5L
· Limited quantities (LQ)	Code: E1
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E

· IMDG	5L
· Limited quantities (LQ)	Code: E1
· Excepted quantities (EQ)	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, (E)
---------------------------------	---

15 Regulatory information
· Safety, health and environmental regulations/legislation specific for the substance or mixture
· Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

7697-37-2	nitric acid	S5, S6
-----------	-------------	--------

· GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).

· 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.

Do not breathe dust/fume/gas/mist/vapours/spray.

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.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

(Contd. on page 7)



Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Nitric Acid Blank, Part Number G1820-60258

(Contd. of page 6)

· **Relevant phrases**

H272 May intensify fire; oxidiser.
H314 Causes severe skin burns and eye damage.

· **Department issuing SDS:** product safety department

· **Contact:**

Agilent Technologies Australia Pty Ltd
1800 802 402

· **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
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. 3: Oxidising Liquids, Hazard Category 3
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

AU

**Safety data sheet
according to NOHSC 2003**

Printing date 09.09.2015

Revision: 09.09.2015

Not classified as hazardous according to criteria of Australian Safety and Compensation Council

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

- English additional compounds
- Product identifier
- Product Name: Wash-Water Blank, Part Number G1820-60259
- Part Number: G1820-60259
- CAS Number:
7732-18-5
- EC number:
231-791-2
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
Analytical Chemistry
A 250 mL Solution
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Agilent Technologies Australia Pty Ltd
679 Springvale Road
Muggrave
Victoria 3170, Australia
- Further information obtainable from: product safety department
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazards identification

- Classification of the substance or mixture The substance is not classified according to the Globally Harmonised System (GHS).
- Label elements
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterisation: Substances
- CAS No. Description
7732-18-5 water, distilled, conductivity or of similar purity
- Identification number(s)
- EC number: 231-791-2

4 First aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)

**Safety data sheet
according to NOHSC 2003**

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Water Blank, Part Number G1820-60259

(Contd. of page 1)

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Follow good laboratory practices.
- **Information about fire - and explosion protection:** No special measures required.
- **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:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
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**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 3)



Safety data sheet according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Water Blank, Part Number G1820-60259

(Contd. of page 2)

- **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:** Goggles recommended during refilling

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

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

· **pH-value:** 5

· **Change in condition**

Melting point/Melting range:	0 °C (32°F)
Boiling point/Boiling range:	100 °C (212°F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not applicable.

· **Self-igniting:** Not determined.

· **Danger of explosion:** 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 at 20 °C:	0.952 mPas
Kinematic:	Not applicable.

· **Solvent content:**

Organic solvents:	0,0 %
Water:	100,0 %
VOC (EC)	0,00 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

(Contd. on page 4)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Water Blank, Part Number G1820-60259

(Contd. of page 3)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us. The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADG, ADN, IMDG, IATA	Void
· UN proper shipping name · ADG, ADN, IMDG, IATA	Void
· Transport hazard class(es) · ADG, ADN, IMDG, IATA · Class	Void
· Packing group · ADG, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

(Contd. on page 5)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Wash-Water Blank, Part Number G1820-60259

(Contd. of page 4)

· UN "Model Regulation":	Void
---------------------------------	------

15 Regulatory information**· Safety, health and environmental regulations/legislation specific for the substance or mixture****· Australian Inventory of Chemical Substances**

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

· GHS label elements Void**· Hazard pictograms** Void**· Signal word** Void**· Hazard statements** Void**· Directive 2012/18/EU****· Named dangerous substances - ANNEX I** Substance is not listed.**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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.

· Department issuing SDS: product safety department**· Contact:**Agilent Technologies Australia Pty Ltd
1800 802 402**· 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

EINECS: European Inventory of Existing Commercial 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

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Not classified as hazardous according to criteria of Australian Safety and Compensation Council

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

- English additional compounds
- Product identifier
- Product Name: Dual Mode 1 Solution, Part Number G1820-60372
- Part Number: G1820-60372
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
Analytical Chemistry
A 100mL Solution
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Agilent Technologies Australia Pty Ltd
679 Springvale Road
Muggrave
Victoria 3170, Australia
- Further information obtainable from: product safety department
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazards identification

- Classification of the substance or mixture The product is not classified according to the Globally Harmonised System (GHS).
- Label elements
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components: Void

CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION

7697-37-2	nitric acid	⚠ Ox. Liq. 3, H272; ⚠ Skin Corr. 1A, H314	0.2%
7440-52-0	Erbium from Erbium(III) oxide	⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; STOT SE 3, H335	0.0001%
7732-18-5	water, distilled, conductivity or of similar purity		99.8%

- Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 1 Solution, Part Number G1820-60372

(Contd. of page 1)

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Follow good laboratory practices.
- **Information about fire - and explosion protection:** No special measures required.
- **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:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
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**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.

(Contd. on page 3)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 1 Solution, Part Number G1820-60372

(Contd. of page 2)

 · **Eye protection:** Goggles recommended during refilling

9 Physical and chemical properties

 · **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/Melting range: 0 °C (32°F)

Boiling point/Boiling range: 100 °C (212°F)

 · **Flash point:** Not applicable.

 · **Flammability (solid, gaseous):** Not applicable.

 · **Ignition temperature:**

Decomposition temperature: Not applicable.

 · **Self-igniting:** Product is not selfigniting.

 · **Danger of explosion:** Product does not present an explosion hazard.

 · **Explosion limits:**

Lower: Not applicable.

Upper: Not applicable.

 · **Vapour pressure:** Not determined.

 · **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:**

Organic solvents: 0.0 %

Water: 99.8 %

VOC (EC) 0.00 %

 · **Other information** No further relevant information available.

10 Stability and reactivity

 · **Reactivity** No further relevant information available.

 · **Chemical stability**

 · **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

 · **Possibility of hazardous reactions** No dangerous reactions known.

 · **Conditions to avoid** No further relevant information available.

 · **Incompatible materials:** No further relevant information available.

 · **Hazardous decomposition products:** No dangerous decomposition products known.

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 1 Solution, Part Number G1820-60372

(Contd. of page 3)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· ADG, ADN, IMDG, IATA	Void
· UN proper shipping name	
· ADG, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADG, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

AU

(Contd. on page 5)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 1 Solution, Part Number G1820-60372

(Contd. of page 4)

15 Regulatory information

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

- Australian Inventory of Chemical Substances

All ingredients are listed.

- Standard for the Uniform Scheduling of Medicines and Poisons

7697-37-2 nitric acid

S5, S6

- GHS label elements Void

- Hazard pictograms Void

- Signal word Void

- Hazard statements Void

- Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients is listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

- Department issuing SDS: product safety department

- Contact:

Agilent Technologies Australia Pty Ltd
1800 802 402

- 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

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

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Not classified as hazardous according to criteria of Australian Safety and Compensation Council

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

- English additional compounds
- Product identifier
- Product Name: Dual Mode 2 Solution, Part Number G1820-60410
- Part Number: G1820-60410
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
Analytical Chemistry
A 100mL Solution
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Agilent Technologies Australia Pty Ltd
679 Springvale Road
Muggrave
Victoria 3170, Australia
- Further information obtainable from: product safety department
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazards identification

- Classification of the substance or mixture The product is not classified according to the Globally Harmonised System (GHS).
- Label elements
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components: Void

CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION

7697-37-2	nitric acid	☠ Ox. Liq. 3, H272; ☠ Skin Corr. 1A, H314	0.2%
7440-52-0	Erbium from Erbium(III) oxide	☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<0.0001%
7732-18-5	water, distilled, conductivity or of similar purity		99.8%

- Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 2 Solution, Part Number G1820-60410

(Contd. of page 1)

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Follow good laboratory practices.
- **Information about fire - and explosion protection:** No special measures required.
- **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:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
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**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.

(Contd. on page 3)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 2 Solution, Part Number G1820-60410

(Contd. of page 2)

- **Eye protection:** Goggles recommended during refilling

9 Physical and chemical properties

- **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/Melting range:** 0 °C (32°F)

- **Boiling point/Boiling range:** 100 °C (212°F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

- **Decomposition temperature:** Not applicable.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:** Not applicable.

- **Upper:** Not applicable.

- **Vapour pressure:** Not determined.

- **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:**

- **Organic solvents:** 0.0 %

- **Water:** 99.8 %

- **VOC (EC)** 0.00 %

- **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity:** No further relevant information available.

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Possibility of hazardous reactions:** No dangerous reactions known.

- **Conditions to avoid:** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:** No dangerous decomposition products known.

-AU
(Contd. on page 4)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 2 Solution, Part Number G1820-60410

(Contd. of page 3)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADG, ADN, IMDG, IATA	Void
· UN proper shipping name · ADG, ADN, IMDG, IATA	Void
· Transport hazard class(es) · ADG, ADN, IMDG, IATA · Class	Void
· Packing group · ADG, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

(Contd. on page 5)

Safety data sheet
according to NOHSC 2003

Printing date 09.09.2015

Revision: 09.09.2015

Product Name: Dual Mode 2 Solution, Part Number G1820-60410

(Contd. of page 4)

15 Regulatory information

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

- Australian Inventory of Chemical Substances

All ingredients are listed.

- Standard for the Uniform Scheduling of Medicines and Poisons

7697-37-2 nitric acid

S5, S6

- GHS label elements Void

- Hazard pictograms Void

- Signal word Void

- Hazard statements Void

- Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients is listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

- Department issuing SDS: product safety department

- Contact:

Agilent Technologies Australia Pty Ltd
1800 802 402

- 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

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