Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

1 Identification of the hazardous chemical and of the supplier

· **Product identifier**

· **Trade name: Graphite Furnace AA Calibration Standard (125 mL)**

· **Part number:** ICM-150
· **Recommended use of the chemical and restrictions on use**
Reagents and Standards for Analytical Chemical Laboratory Use

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

· **Further information obtainable from:**
Telephone: 0800 603 1000
pdl-msds_author@agilent.com
· **Emergency telephone number:** CHEMTREC®: +(60) 3-9212 5794

*
2 Hazard identification

· **Classification of the substance or mixture**


GHS06 skull and crossbones

Acute Tox. 2 H330 Fatal if inhaled.


GHS05 corrosion

Met. Corr. 1 H290 May be corrosive to metals.
Eye Dam. 1 H318 Causes serious eye damage.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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



GHS05 GHS06

· **Signal word** Danger

· **Hazard-determining components of labelling:**
nitric acid
· **Hazard statements**
H290 May be corrosive to metals.

(Contd. on page 2)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 1)

H330 Fatal if inhaled.
H315 Causes skin irritation.
H318 Causes serious eye damage.

· **Precautionary statements**

P260	Do not breathe vapours.
P284	Wear respiratory protection.
P280	Wear protective gloves / eye protection / face protection.
P234	Keep only in original container.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P310	Immediately call a POISON CENTER/doctor.
P320	Specific treatment is urgent (see on this label).
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P390	Absorb spillage to prevent material damage.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

3 Composition and information of the ingredients of the hazardous chemical

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

· **Dangerous components:**		
7697-37-2	nitric acid Ox. Liq. 2, H272; Acute Tox. 1, H330; Skin Corr. 1A, H314; Eye Dam. 1, H318	3.5%

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

*

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing equipment only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 2)

· **After eye contact:** Rinse opened eye for several minutes under running water. Then 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 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

*
6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground 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 section 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.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** Keep respiratory protective device available.

· **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.

(Contd. on page 4)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 3)

*
8 Exposure controls and personal protection

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

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
7697-37-2 nitric acid	
PEL (Malaysia)	Long-term value: 5.2 mg/m³, 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.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
When used as intended with Agilent instruments the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device equipment with appropriate organic or acid gas cartridge.
· **Protection of hands:**
Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.
· **Material of gloves**
For normal use: nitrile rubber, 11-13 mil thickness
For direct contact with the chemical: butyl rubber, 12-15 mil thickness
· **Penetration time of glove material**
For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: > 4 hours
· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

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

(Contd. on page 5)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 4)

Colour:	Colourless
· **Odour:**	Odourless
· **Odour threshold:**	Not determined
· **pH-value:**	Not determined
· **Change in condition**	
Melting point/freezing point	0 °C
Initial boiling point and boiling range	100 °C
· **Flash point:**	Not applicable
· **Flammability**	Not applicable
· **Decomposition temperature:**	Not determined
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined
Upper:	Not determined
· **Vapour pressure at 20 °C:**	23 hPa
· **Density at 20 °C:**	1 g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not determined
· **Evaporation rate**	Not determined
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water**	Not determined
· **Viscosity:**	
Dynamic at 20 °C:	0.952 mPas
Kinematic:	Not determined
· **Solvent content:**	
Water:	96.1 %
VOC (EC)	0.00 %
Solids content:	0.4 %
· **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 6)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 5)

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

*
11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity**

· **LD/LC50 values relevant for classification:**		
ATE (Acute Toxicity Estimates)		
Inhalative	LC50/4 h	1.43 mg/L

7697-37-2 nitric acid		
Inhalative	LC50/4 h	67 mg/L (rat)

· **Primary irritant effect:**
· **Skin corrosion or irritation** Irritant to skin and mucous membranes.
· **Serious eye damage or eye irritation** Strong irritant with the danger of severe eye injury.
· **Respiratory / skin sensitization** 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:
Toxic
Irritant
Very toxic

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:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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 information

· **Waste treatment methods**
· **Recommendation**
Dispose of contents/container in accordance with local/regional/national/international regulations.
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

(Contd. on page 7)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 6)

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

14 Transportation information

· **UN-Number**	
· **ADR, IMDG, IATA**	UN3264
· **UN proper shipping name**	
· **ADR**	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)
· **IMDG, IATA**	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)
· **Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **Packing group**	
· **ADR, IMDG, IATA**	III
· **Environmental hazards:**	Not applicable
· **Special precautions for user**	Warning: Corrosive substances.
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	(SGG1) Acids
· **Stowage Category**	A
· **Stowage Code**	SW2 Clear of living quarters.
· **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

(Contd. on page 8)

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 09.06.2026 Revision: 09.06.2026

Trade name: Graphite Furnace AA Calibration Standard (125 mL)

(Contd. of page 7)

· **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), 8, III

15 Regulatory information

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

· **EHS reference list**	
7697-37-2	nitric acid

· **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

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:** Document Control / Regulatory
· **Contact:** pdl-acg-regulatory-cq@agilent.com
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Ox. Liq. 2: Oxidizing liquids – Category 2
Met. Corr. 1: Corrosive to metals – Category 1
Acute Tox. 1: Acute toxicity - oral – Category 1
Acute Tox. 2: Acute toxicity - oral – Category 2
Skin Corr. 1A: Skin corrosion or irritation – Category 1A
Skin Irrit. 2: Skin corrosion or irritation – Category 2
Eye Dam. 1: Serious eye damage or eye irritation – Category 1
· *** Data compared to the previous version altered.**