

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/11/2018

Reviewed on 09/11/2018

1 Identification

- **Product identifier**
- **Product Name:** Rhodium Internal Standard Stock Solution, Part Number 8500-6945
- **Part Number:** 8500-6945
- **Application of the substance / the mixture**
Reagents and Standards for Analytical Chemistry Laboratory Use
A 100mL Solution
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA
- **Information department:** *product safety department*
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture** *The product is not classified, according to the Globally Harmonized System (GHS).*
- **Label elements**
- **GHS label elements** *Not Regulated*
- **Hazard pictograms** *Not Regulated*
- **Signal word** *Not Regulated*
- **Hazard statements** *Not Regulated*
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

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

3 Composition/information on ingredients

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

Dangerous components:

7647-01-0	hydrochloric acid	2.0%
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Chemical identification of the substance/preparation

7440-16-6	rhodium	0.001%
7732-18-5	water, distilled, conductivity or of similar purity	97.999%

4 First-aid measures

- **Description of first aid measures**
- **General information:** *No special measures required.*

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- **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:** Do not give anything to eat or drink - Do not induce vomiting
- **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 fighting measures that suit the environment.
- **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.
- **Protective Action Criteria for Chemicals**

 · **PAC-1:**

7647-01-0	hydrochloric acid	1.8 ppm
7440-16-6	rhodium	3 mg/m ³

 · **PAC-2:**

7647-01-0	hydrochloric acid	22 ppm
7440-16-6	rhodium	33 mg/m ³

 · **PAC-3:**

7647-01-0	hydrochloric acid	100 ppm
7440-16-6	rhodium	200 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Follow good laboratory practices.
- **Information about protection against explosions and fires:** 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 systems:** No further data; see item 7.

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 · **Control parameters**

 · **Components with limit values that require monitoring at the workplace:**
7647-01-0 hydrochloric acid

 PEL Ceiling limit value: 7 mg/m³, 5 ppm

 REL Ceiling limit value: 7 mg/m³, 5 ppm

 TLV Ceiling limit value: 2.98 mg/m³, 2 ppm

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

 · **Exposure controls**

 · **Personal protective equipment:**

 · **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.

 · **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**

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:** Goggles recommended during refilling.

9 Physical and chemical properties

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

 · **General Information**

 · **Appearance:**

Form: Liquid

Color: Colorless

 · **Odor:** Odorless

 · **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.

 · **Decomposition temperature:** Not applicable.

 · **Auto igniting:** Product is not selfigniting.

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

 · **Explosion limits:**

Lower: Not applicable.

Upper: Not applicable.

 · **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

 · **Density** 1.0 g/mL @ 20°C

 · **Relative density** Not applicable.

 · **Vapor density** Not applicable.

 · **Evaporation rate** Not applicable.

 · **Solubility in / Miscibility with**

Water: Miscible

 · **Partition coefficient (n-octanol/water):** Not applicable.

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· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Water:	98.0 %
VOC content:	0.00 %
· Solids content:	
	0.0 %
· 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:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product is not subject to classification according to internally approved calculation methods for preparations:
 When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **Carcinogenic categories**

 · **IARC (International Agency for Research on Cancer)**

7647-01-0 hydrochloric acid

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 · **NTP (National Toxicology Program)**

None of the ingredients is listed.

 · **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior 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.

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 · *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 packagings:*
- *Recommendation:* Disposal must be made according to official regulations.

14 Transport information

<ul style="list-style-type: none"> · <i>UN-Number</i> · <i>DOT, ADR, IMDG, IATA</i> 	UN1789
<ul style="list-style-type: none"> · <i>UN proper shipping name</i> · <i>DOT</i> · <i>ADR</i> · <i>IMDG, IATA</i> 	Hydrochloric acid 1789 Hydrochloric acid HYDROCHLORIC ACID
<ul style="list-style-type: none"> · <i>Transport hazard class(es)</i> · <i>DOT</i> 	
	
<ul style="list-style-type: none"> · <i>Class</i> · <i>Label</i> 	8 Corrosive substances 8
<ul style="list-style-type: none"> · <i>ADR, IMDG, IATA</i> 	
	
<ul style="list-style-type: none"> · <i>Class</i> · <i>Label</i> 	8 Corrosive substances 8
<ul style="list-style-type: none"> · <i>Packing group</i> · <i>DOT, ADR, IMDG, IATA</i> 	III
<ul style="list-style-type: none"> · <i>Environmental hazards:</i> 	Not applicable.
<ul style="list-style-type: none"> · <i>Special precautions for user</i> · <i>Danger code (Kemler):</i> · <i>EMS Number:</i> · <i>Segregation groups</i> · <i>Stowage Category</i> 	Warning: Corrosive substances 80 F-A,S-B Acids E
<ul style="list-style-type: none"> · <i>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</i> 	Not applicable.
<ul style="list-style-type: none"> · <i>Transport/Additional information:</i> 	
<ul style="list-style-type: none"> · <i>ADR</i> · <i>Excepted quantities (EQ)</i> 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> · <i>IMDG</i> · <i>Limited quantities (LQ)</i> 	5L

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 · **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 1789 HYDROCHLORIC ACID, 8, III

15 Regulatory information

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

 · **Sara**

 · **Section 313 (Specific toxic chemical listings):**

7647-01-0 hydrochloric acid

 · **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

 · **Proposition 65**

 · **Chemicals known to cause cancer:**

None of the ingredients is listed.

 · **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

 · **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

 · **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

 · **Carcinogenic categories**

 · **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

 · **TLV (Threshold Limit Value established by ACGIH)**

7647-01-0 hydrochloric acid

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 · **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

 · **GHS label elements** Not Regulated

 · **Hazard pictograms** Not Regulated

 · **Signal word** Not Regulated

 · **Hazard statements** Not Regulated

 · **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, Inc.

800-227-9770

 · **Date of preparation / last revision** 09/11/2018 / -

 · **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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

US