

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Palladium AA Standard Solution, 1000 ppm
CAS number	N/A
Synonyms	N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to Metals	Category 1
Skin Sensitization	Category 1
Short-term (Acute) Aquatic Hazard	Category 2
Long-term (Chronic) Aquatic Hazard	Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

May be corrosive to metals.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: Keep only in original container. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Spills: Absorb spillage to prevent material damage. Collect spillage.

Storage: Store in corrosive resistant container with a resistant inner liner.

Disposal: Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua; H ₂ O	7732-18-5	>89.9%
Hydrochloric acid	Hydrogen chloride; Muriatic acid	7647-01-0	5-10%
Palladium(II) chloride	Palladous chloride	7647-10-1	0.1-1%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Remove to fresh air. Consult doctor if feeling unwell.

In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact Rinse out with plenty of water. Remove contact lenses.

If swallowed Immediately make victim drink water (two glasses at most).

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media For this substance/mixture, no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours. Hydrogen chloride gas. Palladium oxides.

5.3 Special protective equipment and precautions for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection, see Section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

See Section 13 for disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Precautions on safe handling**

For precautions, see Section 2.2.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

No metal containers. Tightly closed.

Incompatibilities

Incompatible with strong bases and oxidizing agents. Metals.

SECTION 8: Exposure controls/personal protection**8.1 Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Component	Type	Value	
Hydrochloric acid	Ceiling	5 ppm	7 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value
Hydrochloric acid	Ceiling	2 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Hydrochloric acid	Ceiling	5 ppm 7 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Recommended Filter type: Filter type ABEK.
Required when vapours/aerosols are generated.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	No data available
Odor Threshold	No data available
pH	No data available
Melting Point/Range	No data available

Boiling Point/Range	No data available
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No data available
Vapor Density	No data available
Density	No data available
Solubility	Soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	N/A
Molecular Weight	N/A
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with the generally known reaction partners of water.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Incompatible with strong bases and oxidizing agents. Metals.

10.6 Hazardous decomposition products

In the event of fire, see Section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

No information available.

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Hydrochloric acid	7647-01-0	Not listed	Not listed	Not listed	Not listed	Not listed
Palladium(II) chloride	7647-10-1	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Hydrochloric acid	LC50	Gambusia affinis	282 mg/L/96h

Palladium(II) chloride	LC50	Oncorhynchus mykiss	0.154 mg/L/96h semi-static
	EC50	Daphnia magna	0.035 mg/L/48h static
	ErC50	Pseudokirchneriella subcapitata	0.00296 mg/L/72h static

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN1789
Proper Shipping Name	Hydrochloric acid
Hazard Class	8
Packing Group	III

IMDG

UN-no	UN1789
Proper Shipping Name	Hydrochloric acid
Hazard Class	8
Packing Group	III

IATA

UN-no	UN1789
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Proper Shipping Name Hydrochloric acid
Hazard Class 8
Packing Group III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed, Hydrochloric acid (CAS #7647-01-0), RQ: 5000 lb.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
No SARA Hazards.

SARA 313 (TRI reporting)
Listed, Hydrochloric acid (CAS #7647-01-0).

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Not listed.

US state regulations

US. Massachusetts RTK - Substance List
Listed, Hydrochloric acid (CAS #7647-01-0).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Hydrochloric acid (CAS #7647-01-0).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Hydrochloric acid (CAS #7647-01-0).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 11/06/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.