

## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name Nickel AA Standard Solution, 1000 µg/ml  
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.

#### 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 Corrosion/Irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B

## 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation. May cause cancer by inhalation. May damage the unborn child.
Precautionary statements	<p>Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. In case of inadequate ventilation wear respiratory protection. Use only outdoors or in a well-ventilated area. Keep only in original container.</p> <p>Response: Immediately call a POISON CENTER or doctor/physician.</p> <p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.</p> <p>Spills: Absorb spillage to prevent material damage.</p> <p>Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in corrosive resistant polypropylene container with a resistant liner. Store in a dry place.</p> <p>Disposal: Dispose of contents/container to an approved waste disposal plant.</p>

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

Harmful to aquatic life with long lasting effects.  
WARNING: Cancer and Reproductive Harm.

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua; H <sub>2</sub> O	7732-18-5	>98%
Nitric acid [C≤70%]	-	7697-37-2	2-5%
Nickel(II) nitrate, hexahydrate	-	13478-00-7	0.50%

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

##### General advice

- If inhaled** Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.
- In case of skin contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
- In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
- If swallowed** Do NOT induce vomiting. Call a physician or poison control center immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

Causes eye burns. May cause allergic skin reaction. Causes burns by all exposure routes. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

## 5.1 Extinguishing media

**Suitable extinguishing media** Water spray, Carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

## 5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: Nitrogen oxides (NO<sub>x</sub>).

## 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 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
3	1	0	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed, seek immediate medical assistance.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place. Corrosives area.

#### Incompatibilities

Strong bases. Strong reducing agents.

## 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	
Nitric acid [C≤70%]	(Vacated) TWA	2 ppm	5 mg/m <sup>3</sup>
	(Vacated) STEL	4 ppm	10 mg/m <sup>3</sup>
	TWA	2 ppm	5 mg/m <sup>3</sup>
Nickel(II) nitrate hexahydrate	(Vacated) TWA	0.1 mg/m <sup>3</sup>	

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Nitric acid [C≤70%]	TWA	2 ppm
	STEL	4 ppm
Nickel(II) nitrate hexahydrate	TWA	0.1 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Nitric acid [C≤70%]	IDLH	25 ppm	
	TWA	2 ppm	5 mg/m <sup>3</sup>

	STEL	4 ppm	10 mg/m <sup>3</sup>
Nickel(II) nitrate hexahydrate	IDLH	10 mg/m <sup>3</sup>	
	TWA	0.015 mg/m <sup>3</sup>	

### Biological occupational exposure limits

No information available.

## 8.2 Exposure controls

### Appropriate engineering controls

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

#### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### 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

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143. Acid gases filter. Type E. Yellow. Conforming to EN14387.

### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Blue green
Odor	Odorless
Odor Threshold	No information available
pH	< 1
Melting Point/Range	No data available

Boiling Point/Range	101 °C / 213.8 °F
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	Miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	N/A
Molecular Weight	N/A
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Corrosive to metals.

### 10.4 Conditions to avoid

Incompatible products. Excess heat.

### 10.5 Incompatible materials

Strong bases, Strong reducing agents.

### 10.6 Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

## Product Information, Component Information

### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nitric acid [C≤70%]	-	-	2500 ppm (Rat) 1h
Nickel(II) nitrate hexahydrate	1620 mg/kg (Rat)	-	-

### Skin corrosion/irritation

Irritating to skin.

### Serious eye damage/eye irritation

Causes eye burns.

### Respiratory or skin sensitization

No information available.

### 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
Nitric acid [C≤70%]	7697-37-2	Not listed	Not listed	Not listed	Not listed	Not listed
Nickel(II) nitrate hexahydrate	13478-00-7	Group 1	Known	Not listed	X	Not listed

### Specific target organ toxicity - single exposure

Respiratory system.

### Specific target organ toxicity - repeated exposure

None known.

### Reproductive toxicity

Product is or contains a chemical which is a known or suspected reproductive hazard.

### Chronic effects

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation.

## 11.2 Additional Information

The toxicological properties have not been fully investigated.



## SECTION 12: Ecological information

### 12.1 Toxicity

Do not empty into drains. Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

### 12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

### 12.3 Bio accumulative potential

No information available.

### 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

### 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	UN2031
Proper Shipping Name	Nitric acid
Hazard Class	8
Packing Group	II

### IMDG

UN-no	UN2031
Proper Shipping Name	Nitric acid
Hazard Class	8
Packing Group	II

### IATA

UN-no	UN2031
Proper Shipping Name	Nitric acid
Hazard Class	8
Packing Group	II

## 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, Nitric acid (CAS #7697-37-2), RQ: 1000 lb.

**SARA 304 Emergency release notification**

Listed, Nitric acid (CAS #7697-37-2), RQ: 1000 lb.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Listed, Nitric acid (CAS #7697-37-2), TPQ: 1000 lb.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Listed, Nitric acid (CAS #7697-37-2).

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Clean Water Act (CWA)**

Listed, Nitric acid (CAS #7697-37-2), RQ: 1000 lb.

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed, Nitric acid (CAS #7697-37-2).

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

Listed, Nitric acid (CAS #7697-37-2).

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

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

Listed, Nitric acid (CAS #7697-37-2).

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

**California Proposition 65**

Listed, Nickel(II) nitrate hexahydrate (CAS #13478-00-7).

**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.