

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/05/2015

Reviewed on 06/26/2015

### \* 1 Identification

- **Product identifier**
- **Trade name:** Amino Acids Calibration Standards (basics, acidics and neutrals)
- **Product number:** 1700-0180, 1700-0175
- **Relevant identified uses of the substance or mixture and uses advised against:**  
No further relevant information available.
- **Product description** Amino Acids Calibration Standards
- **Details of the supplier of the safety data sheet:**
- **Manufacturer/Supplier:**  
Pickering Laboratories, Inc.  
1280 Space Park Way  
Mountain View, CA 94043  
Phone: (650) 694-6700  
Fax: (650) 968-0749  
www.pickeringlabs.com  
support@pickeringlabs.com
- **Emergency telephone number:**  
Clean Harbors Environmental Services  
1-800-645-8265

### \* 2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

- **Label elements:**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05

- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
Hydrochloric acid
- **Hazard statements:**  
Causes severe skin burns and eye damage.
- **Precautionary statements:**  
Do not breathe dusts or mists.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash thoroughly after handling.  
IF ON SKIN (or hair): Remove/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.  
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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Wash contaminated clothing before reuse.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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



- **Hazard(s) not otherwise classified (HNOC):** None

### \* 3 Composition/information on ingredients

7732-18-5	Water, distilled water, deionized water	>99%
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- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**

CAS: 7647-01-0	Hydrochloric acid	⚠ Skin Corr. 1B, H314; ⚠ STOT SE 3, H335	<0.5%
RTECS: MW 9620000			

### \* 4 First-aid measures

- **Description of first aid measures:**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Not anticipated under normal use.
- **After skin contact:**  
 Immediately wash with water and soap and rinse thoroughly.  
 If skin irritation occurs, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
 Rinse mouth with water ensuring that rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomiting by touching finger to the back of the victims throat. Get medical assistance 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 Fire-fighting measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
 CO<sub>2</sub>, extinguishing 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.

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- **Advice for firefighters:**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

\* **6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures:**  
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:**  
Ensure adequate ventilation.  
Use neutralizing agent.  
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.
- **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.  
Avoid contact with skin, eyes and clothing  
Avoid breathing fumes.  
Use personal protection equipment as outlined in section 8.  
Prevent formation of aerosols.
- **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:** Store frozen
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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 section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**  
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 that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Use adequate exhaust ventilation to prevent inhalation of product vapors.  
Do not eat or drink while handling product.  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing and wash before reuse.

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Respiratory protection is not required unless handling of the material produces nuisance airborne concentrations.

· **Protection of hands:**



Protective gloves

· **Material of gloves:** Rubber, latex or vinyl.

· **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Tightly sealed goggles

\* **9 Physical and chemical properties**

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

· **General Information**

· **Appearance:**

- |                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Liquid          |
| <b>Color:</b>          | Colorless       |
| <b>Odor:</b>           | Odorless        |
| <b>Odor threshold:</b> | Not determined. |

· **pH-value @ 20 °C (68 °F):** 1.2

· **Change in condition**

- |                                     |                 |
|-------------------------------------|-----------------|
| <b>Melting point/Melting range:</b> | Not determined. |
| <b>Boiling point/Boiling range:</b> | 100 °C (212 °F) |

· **Flash point:** Not applicable.

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

· **Ignition temperature:**

**Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

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

· **Explosion limits:**

- |               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

· **Vapor pressure:** Not determined.

· **Density:**

- |                          |                 |
|--------------------------|-----------------|
| <b>Relative density:</b> | Not determined. |
| <b>Vapor density:</b>    | Not determined. |

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- Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
- Water:** Aqueous solution
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
- Dynamic:** Not determined.
- Kinematic:** Not determined.
- **Other information:** No further relevant information available.

**10 Stability and reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **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:** Strong caustic effect on skin and mucous membranes.
- **On the eye:** Corrosive effect.
- **Additional toxicological information:**  
 The product shows the following dangers according to internally approved calculation methods for preparations:  
 Corrosive  
 Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories:**

· <b>IARC (International Agency for Research on Cancer):</b>	
7647-01-0   Hydrochloric acid	3

· **NTP (National Toxicology Program):**

None of the ingredients are listed.
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· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.
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\* **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.

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· **Additional ecological information:**

· **General notes:**

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **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:**

Do not allow product to reach sewage system.

This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an after burner and scrubber. This product can also be sent to an EPA approved waste disposal facility.

Observe all federal, state and local environmental regulations when disposing of this material.

· **Uncleaned packagings:**

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

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

\* **14 Transport information**

· **UN-Number:**

· **DOT, ADR, IMDG, IATA** UN1789

· **UN proper shipping name:**

· **DOT** Hydrochloric acid  
 · **ADR** UN1789 Hydrochloric acid  
 · **IMDG, IATA** HYDROCHLORIC ACID

· **Transport hazard class(es):**

· **DOT**



· **Class:** 8 Corrosive substances

· **Label:** 8

· **ADR**

· **Class:** 8 Corrosive substances

· **IMDG, IATA**



· **Class:** 8 Corrosive substances

· **Label:** 8

· **Packing group:**

· **DOT, ADR, IMDG, IATA** III

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- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Warning: Corrosive substances
- **EMS Number:** F-A,S-B
- **Segregation groups:** Acids
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **Transport/Additional information:**

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- **ADR**
- **Excepted quantities (EQ):** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml
- **UN "Model Regulation":** UN1789, Hydrochloric acid, 8, III

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· <b>Section 355 (extremely hazardous substances):</b>	
7647-01-0	Hydrochloric acid

· <b>Section 313 (Specific toxic chemical listings):</b>	
7647-01-0	Hydrochloric acid

· <b>TSCA (Toxic Substances Control Act):</b>	
All ingredients are listed.	

· <b>California Proposition 65:</b>	
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· <b>Chemicals known to cause cancer:</b>	
None of the ingredients are listed.	

· <b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients are listed.	

· <b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients are listed.	

· <b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients are listed.	

- **Carcinogenic categories:**

· <b>EPA (Environmental Protection Agency):</b>	
None of the ingredients are listed.	

· <b>TLV (Threshold Limit Value established by ACGIH):</b>		
7647-01-0	Hydrochloric acid	A4

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health):</b>	
None of the ingredients are listed.	

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms:**



GHS05

· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Hydrochloric acid

· **Hazard statements:**

Causes severe skin burns and eye damage.

· **Precautionary statements:**

Do not breathe dusts or mists.

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

Wash thoroughly after handling.

IF ON SKIN (or hair): Remove/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.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Store locked up.

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

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· **State Right to Know:**

CAS: 7732-18-5	Water, distilled water, deionized water	>99%
CAS: 7647-01-0	Hydrochloric acid	<0.5%
RTECS: MW 9620000	⚠ Skin Corr. 1B, H314; ⚠ STOT SE 3, H335	

All ingredients are listed.

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

### 16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 08/05/2015 / 1

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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)



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NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· **\* Data compared to the previous version altered.**

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