

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 03.

Issue date 05/21/2020 Reviewed on 05/21/2020

1 Identification

- · Product Identifier
- · Trade Name: TRIONE Ninhydrin Reagent (Part 1)
- · Product Number: T200
- · Relevant identified uses of the substance or mixture and uses advised against: For laboratory use
- · Product Description:

TRIONE Ninhydrin Reagent(Part 1) for post-column derivitization of primary and secondary amino acids.

- 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:



Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements:
- · Hazard pictograms:



- · Signal word: Warning
- · Hazard-determining components of labeling:

lithium acetate

· Hazard statements:

H315+H320 Causes skin and eye irritation. H335 May cause respiratory irritation.

· Precautionary statements:

P260 Do not breathe mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a poison center/doctor if you feel unwell.

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P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P362+P364 Take off contaminated clothing and wash it before reuse. P332+P313 If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Classification system:

NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 0

Physical Hazard = 0

· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

· Non-hazardous components:

7732-18-5 Water, distilled water, deionized water

70-90%

- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with non-hazardous additions.
- · Dangerous Components:

546-89-4 lithium acetate

15-35%

Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320

· Additional information:

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

- · Description of first aid measures
- · After inhalation: Not anticipated under normal use.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

· After swallowing:

Rinse mouth with water ensuring that rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomitting 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.

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5 Fire-Fighting Measures

- · Extinguishing media
- Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents: No further relevant information is available.
- · Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- · Special protective equipment for firefighters:

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: Not required.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of 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.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles:

Store in dry conditions at a temperature range of 8°C - 25°C.

- · 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.

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Do not eat or drink while handling product.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing and wash before reuse.

· Breathing equipment:

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

· Protection of hands:



Protective gloves

- · Material of gloves: 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:

Form: Viscous
Color: Yellow
Odor: Odorless

Odor threshold: Not determined.pH-value: Not available

· Change in condition

Melting point/Melting range: Not determined. Boiling point/Boiling range: Not determined.

· Flash point: None

Flammability (solid, gaseous): Not applicable.
 Decomposition temperature: Not determined.

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

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

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapor pressure: Not determined.

· Density:

Relative density: Not determined. Vapor density: 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:

Keep away from strong acids. Primary and secondary amines will cause non-hazardous contamination of this solution.

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects:
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

546-89-4 lithium acetate

Oral Toxic Dose Low 1500000 µg/kg (Mouse)

- · Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · On the eye: Irritating effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- · Carcinogenic categories:
- · IARC (International Agency for Research on Cancer):

Substance is not listed.

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

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

None of the ingredients are listed.

12 Ecological Information

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

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Trade Name: TRIONE Ninhydrin Reagent (Part 1)

- · Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · 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 afterburner 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 packaging
- · **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/ADN, ADN, IMDG, IATA Non-Regulated Material

· UN proper shipping name:

· DOT, ADR/ADN, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es):

· DOT, ADR/ADN, ADN, IMDG, IATA

· Class: Non-Regulated Material

· Packing group:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

Environmental hazards: Not applicable.Special precautions for user: Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

546-89-4 lithium acetate

7732-18-5 Water, distilled water, deionized water

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· California Proposition 65:

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic categories:

EPA (Environmental Protection Agency):

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

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

None of the ingredients are listed.

· GHS label elements

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

· Hazard pictograms:



- · Signal word: Warning
- Hazard-determining components of labeling:

lithium acetate

· Hazard statements:

H315+H320 Causes skin and eye irritation. H335 May cause respiratory irritation.

Precautionary statements:

P260 Do not breathe mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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present and easy to do. Continue rinsing.

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· National regulations:

None of the ingredients are listed.

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

<u>16 Other Info</u>rmation

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 last revision/ revision number: 05/21/2020 / 6
- · 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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation - Category 2B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.

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