

MSDS Number: **H2500** \* \* \* \* \* *Effective Date: 06/11/07* \* \* \* \* \* *Supercedes: 05/13/05*



From: Mallinckrodt Baker, Inc.  
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24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-996-6666

Outside U.S. and Canada  
Chemtec: 703-527-3887

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

# HYDROCHLORIC ACID, 0.01N to 0.2N VOLUMETRIC SOLUTIONS (0.04 to 0.4%)

## 1. Product Identification

**Synonyms:** None  
**CAS No.:** Not applicable to mixtures.  
**Molecular Weight:** Not applicable to mixtures.  
**Chemical Formula:** Not applicable.  
**Product Codes:**  
J.T. Baker: 0326, 5611, 5614, 5621  
Mallinckrodt: 2853

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
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Hydrogen Chloride	7647-01-0	0.04 - 0.4%
Yes		
Water	7732-18-5	> 99%
No		

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### 3. Hazards Identification

#### Emergency Overview

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**As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

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Health Rating: 0 - None

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

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#### Potential Health Effects

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**Inhalation:**

Not expected to be a health hazard.

**Ingestion:**

Large oral doses may cause gastrointestinal disturbances.

**Skin Contact:**

No adverse effects expected.

**Eye Contact:**

May cause irritation, redness and pain.

**Chronic Exposure:**

No information found.

**Aggravation of Pre-existing Conditions:**

No information found.

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### 4. First Aid Measures

**Inhalation:**

Not expected to require first aid measures.

**Ingestion:**

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

**Skin Contact:**

Not expected to require first aid measures.

**Eye Contact:**

Wash thoroughly with running water. Get medical advice if irritation develops.

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## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust.

J. T. Baker NEUTRASORB® acid neutralizers are recommended for spills of this product.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Protect from freezing. Containers of this material may be hazardous when empty since they retain product residues

(vapors, liquid); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

Not applicable.

**Ventilation System:**

Not expected to require any special ventilation.

**Personal Respirators (NIOSH Approved):**

Not expected to require personal respirator usage.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

Clear, colorless solution.

**Odor:**

Odorless.

**Solubility:**

Infinitely soluble.

**Specific Gravity:**

ca. 1.0

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

> 99

**Boiling Point:**

ca. 100C (ca. 212F)

**Melting Point:**

ca. 0C (ca. 32F)

**Vapor Density (Air=1):**

Essentially the same as water.

**Vapor Pressure (mm Hg):**

Essentially the same as water.

**Evaporation Rate (BuAc=1):**

Essentially the same as water.

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## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

No information found.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

No incompatibility data found.

**Conditions to Avoid:**

No information found.

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## 11. Toxicological Information

-----\Cancer Lists\-----

Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	
Hydrogen Chloride (7647-01-0)	No	No	3
Water (7732-18-5)	No	No	
None			

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## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

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## 13. Disposal Considerations

Dilute with water and flush to sewer if local ordinances allow, otherwise, whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

### Domestic (Land, D.O.T.)

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**Proper Shipping Name:** HYDROCHLORIC ACID SOLUTION

**Hazard Class:** 8

**UN/NA:** UN1789

**Packing Group:** III

**Information reported for product/size:** 20L

### International (Water, I.M.O.)

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**Proper Shipping Name:** HYDROCHLORIC ACID SOLUTION

**Hazard Class:** 8

**UN/NA:** UN1789

**Packing Group:** III

**Information reported for product/size:** 20L

### International (Air, I.C.A.O.)

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**Proper Shipping Name:** HYDROCHLORIC ACID SOLUTION

**Hazard Class:** 8

**UN/NA:** UN1789

**Packing Group:** III

**Information reported for product/size:** 20L

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## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan
Australia			
Hydrogen Chloride (7647-01-0)	Yes	Yes	Yes
Yes			
Water (7732-18-5)	Yes	Yes	Yes
Yes			

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	Phil.	Canada
			DSL
			NDSL

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Yes
Hydrogen Chloride (7647-01-0) Yes Yes No
Yes
Water (7732-18-5) Yes Yes No
Yes

-----\Federal, State & International Regulations - Part 1\-----
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313----- -SARA 302- -----SARA
Ingredient RQ TPQ List
Chemical Catg.
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Hydrogen Chloride (7647-01-0) 5000 500* Yes
No
Water (7732-18-5) No No No
No

-----\Federal, State & International Regulations - Part 2\-----
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TSCA- -RCRA- -
Ingredient CERCLA 261.33 8 (d)
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-
Hydrogen Chloride (7647-01-0) 5000 No No
Water (7732-18-5) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No
Reactivity: No (Mixture / Liquid)

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**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: **0** Flammability: **0** Reactivity: **0**

**Label Hazard Warning:**

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

**Label Precautions:**

None.

**Label First Aid:**

Not applicable.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 3, 14.

**Disclaimer:**

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