

Revision date: 07/17/2017

Version: 1.1

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

1.1. Product identifier

Trade name/designation:	Hydrochloric Acid
Product No.:	BDH3026-500MLP BDH3028-2.5LG BDH3030-2.5LPC BDH3032-3.8LP BDH3034-19L BDH3036-54L BDH3038-191L BDH3128-2.2LP
Other means of identification: Aqueous hydrogen chloride, Muriatic acid	

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

Relevant identified uses: Manufacturing and Laboratory use

1.3. Details of the supplier of the safety data sheet

Manufactured for	VWR International, LLC Radnor Corporate Center 100 Matsonford Road Radnor, PA 19087-8660	VWR International Co. 2360 Argentia Road Mississauga, ON L5N 5Z7 CANADA
Telephone	610.386.1700	800.932.5000

1.4. Emergency Telephone number

CHEMTREC	800.424.9300
CANUTEC	613.996.6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

For the full text of the H-Statement(s) and P-Statement(s) mentioned in this Section, see Section 16.

Hazard classes and hazard categories	Hazard statements
Corrosive to metals; Category 1	May be corrosive to metals.
Skin corrosion; Category 1B	Causes severe skin burns and eye damage.
Serious eye damage; Category 1	Causes serious eye damage.
Specific target organ toxicity-single	May cause respiratory irritation.

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

exposure; Category 3

2.2. GHS Label elements, including precautionary statements



Pictograms

Signal word Danger

Hazard statements	
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Precautionary statements	
P234	Keep only in original container.
P260	Do not breathe fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
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.
P310	Immediately call a POISON CENTER/doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material-damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant liner.
P501	Dispose of contents/container in accordance with local regulations.

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

Not Available

SECTION 3: Composition / information on ingredients

3.1. Hazard components

Chemical name	Formula	Molecular weight	CAS#	Weight%
Hydrochloric Acid	HCl	36.46 g/mol	7647-01-0	36-38
Water	H ₂ O	18.00 g/mol	7732-18-5	Balance

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

SECTION 4: First aid measures

4.1. General information

In case of inhalation

Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respirations.

In case of skin contact

Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

In case of eye contact

Immediately rinse with plenty of water for at least 15 minutes and seek medical attention.

In case of ingestion

Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

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

Contact with skin may cause staining severe burns depending on duration of contact. Contact to eyes may cause severe burns and possible irreversible eye damage including corneal injury and cataracts. Inhalation may cause coughing burns and breathing difficulty. May cause acute pulmonary edema. Ingestion may cause burns, nausea, vomiting, convulsions, shock, and may cause severe and permanent damage to gastrointestinal tract.

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

Not Available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool unopened containers with water.

5.2. Special hazards arising from the substance or mixture

Hydrogen chloride gas

5.3. Special protective equipment for firefighters

Not Available

5.4. Hazardous combustion products

Not Available

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

5.5. Advice for firefighters

Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

5.6. Additional information

Not Available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for recommendations on the use of personal protective equipment.

6.2. Environmental precautions

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

6.3. Methods and material for containment and cleaning up

Neutralize spill with sodium bicarbonate or soda lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

6.4. Additional information

Not Available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities). Avoid formation of aerosols.

7.3. Specific end use(s)

Not Available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Hydrochloric Acid	2 ppm	CEIL	ACGIH
	2.98 mg/m ³		
	5 ppm	CEIL	OSHA
	7 mg/m ³		
	5 ppm	CEIL	NIOSH
	7 mg/m ³		
	50 ppm	IDLH	OSHA

8.2. Exposure controls

Appropriate engineering controls

- Showers
- Eye wash stations
- Ventilation system

Personal protection equipment

Eye/face protection

Safety glasses or goggles with face shield

Skin protection

Nitrile or rubber gloves and full body protection

Respiratory protection

Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

- a) Appearance:
 - Physical state Liquid
 - Color Clear and light yellow to colorless
- b) Odor Strong, pungent odor
- c) Odor Threshold 0.25 – 10 ppm
- d) pH Not Available
- e) Melting point/ -30°C (-22°F)

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

	freezing point	
f)	Initial boiling point and boiling range	Not Available
g)	Flash point	Not Available
h)	Evaporation rate	Not Available
i)	Flammability (solid, gas)	Not Available
j)	Upper/lower flammability or explosive limits	Not Available
k)	Vapor pressure	227 hPa (170 mmHg) at 21.1°C (70°F) 547 hPa (410 mmHg) at 37.7°C (99.9°F)
l)	Vapor density	1.267
m)	Relative density	1.18
n)	Solubilities	Not Available
o)	Partition coefficient (n-Octanol/Water)	Not Available
p)	Auto-ignition temperature	Not Available
q)	Decomposition temperature	
r)	Viscosity	Not Available
s)	Explosive properties	Not Available
t)	Oxidizing properties	Not Available

9.2. Other information

Not Available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not Available

10.2. Chemical stability

Stable under normal storage conditions

10.3. Possibility of hazardous reactions

Not Available

10.4. Conditions to avoid

Uncontrolled additions of water.

10.5. Incompatible materials

Metals, oxidizing agents, organic materials, alkalis, and water.

10.6. Hazardous decomposition products

Hydrogen chloride gas

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

SECTION 11: Toxicology

11.1. Information on toxicological effects

Acute toxicity

Oral LD₅₀ - rat - 900 mg/kg

Inhalation LC₅₀ – Not Available

Dermal LD₅₀ – Not Available

Other information on acute toxicity – Not Available

Skin corrosion/irritation

Not Available

Serious eye damage/eye irritation

Not Available

Respiratory or skin sensitization

Not Available

Germ cell mutagenicity

Not Available

Carcinogenicity

IARC – 3- Group 3: Not classifiable as to its carcinogenicity to humans (hydrochloric acid)

ACGIH – A4: Not classifiable as a human carcinogen (hydrochloric acid)

Reproductive toxicity

Not Available

Specific target organ toxicity-single exposure

Causes respiratory irritation.

Specific target organ toxicity-repeated exposure

Not Available

Aspiration hazard

Not Available

Additional information

Not Available

SECTION 12: Ecological information

12.1. Ecotoxicity

LC50 – *Gambusia affinis* (Mosquito fish) – 282 mg/L – 96h

12.2. Persistence and degradability

Not Available

12.3. Bioaccumulative potential

Not Available

12.4. Mobility in soil

Not Available

12.5. Results of PBT and vPvB assessment

Not Available

12.6. Other adverse effects

Not Available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land Transport DOT (U.S.)

UN Number	1789
Proper Shipping name	Hydrochloric acid
Class	8
Hazard Label(s)	Corrosive
Packing Group	II
Environmental hazard(s)	--

Land Transport TDG

UN Number	1789
Proper Shipping name	Hydrochloric acid
Class	8

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

Hazard Label(s)	Corrosive
Packing Group	II
Environmental hazard(s)	--
Marine Pollutant	--

Sea Transport IMDG

UN Number	1789
Proper Shipping name	Hydrochloric acid
Class	8
Hazard Label(s)	Corrosive
EMS- No.	F-A, S-B
Packing Group	II
Environmental hazard(s)	--
Segregation Group	--

Air Transport IATA

UN Number	1789
Proper Shipping name	Hydrochloric acid
Class	8
Hazard Label(s)	Corrosive
Packing Group	II
Environmental hazard(s)	--

SECTION 15: Regulatory information

OSHA Hazards

Corrosive

SARA 302 Extremely Hazardous Substances

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 (TRI reporting)

Hydrochloric Acid

SARA 311/312 Hazardous Chemicals

Acute Health Hazard

Massachusetts Right-To-Know Substance List

Hydrochloric Acid

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

Pennsylvania Right-To-Know Hazardous substances

Hydrochloric Acid
Water

New Jersey Worker and Community Right-To-Know Components

Hydrochloric Acid
Water

California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Inventory status:

Canada DSL Inventory List: Listed
US TSCA Inventory List: Listed
EINECS, ELINCS or NLP: 231-595-7

Canada Federal Regulations:

List of Toxic Substances (CEPA, Schedule 1): Not Listed
Export Control List (CEPA 1999, Schedule 3): Not Listed
National Pollutant Release Inventory (NPRI): Listed
Greenhouse Gases: Not Listed
Controlled Drugs and Substances Act: Not Listed
Precursor Control Regulations: Not Listed

International Regulations:

Montreal Protocol: Not Applicable
Stockholm Convention: Not Applicable
Rotterdam Convention: Not Applicable
Kyoto Protocol: Not Applicable

SECTION 16: Other information**Full text of H-Statement(s) and P-Statement(s)**

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
P234	Keep only in original container.
P260	Do not breathe fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material-damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant liner.
P501	Dispose of contents/container in accordance with local regulations.

Canadian Carcinogenicity hazard class:	Not Applicable
PHNOC hazard class:	Not Applicable
HHNOC hazard class:	Not Applicable
Biohazardous Infectious Materials hazard class:	Not Applicable

NFPA Rating:

Health: 3
Flammability: 0
Reactivity: 1
Special Hazard:



DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

Product Number: BDH3026-500MLP, BDH3028-2.5LG, BDH3030-2.5LPC, BDH3032-3.8LP, BDH3034-19L, BDH3036-54L, BDH3038-191L, TX3038191LSOI, TXBDH303238CPI, TXLBDH3038DSOI, BDH3128-2.2LP