



Univar USA Inc Safety Data Sheet

SDS No:

Version No:

Order No:

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

Safety Data Sheet



HYDROCHLORIC ACID SOLUTIONS

Version 3.0

Revision Date 12/10/2015

Ref. 150000000889

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	: HYDROCHLORIC ACID SOLUTIONS
Product Grade/Type	: HCL, HCL 20 DEG, HCL 23 DEG
Product Use	: Industrial applications, For industrial use only.
Restrictions on use	: Do not use product for anything outside of the above specified uses
Manufacturer/Supplier	: The Chemours Company FC, LLC 1007 Market Street Wilmington, DE 19899 United States of America
Product Information	: 1-844-773-CHEM (outside the U.S. 1-302-773-1000)
Medical Emergency	: 1-866-595-1473 (outside the U.S. 1-302-773-2000)
Transport Emergency	: CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category

Corrosive to metals	Category 1
Acute toxicity (Inhalation)	Category 4
Skin corrosion	Category 1
Serious eye damage/eye irritation	Category 1
Aspiration hazard	Category 1

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Label content
Pictogram



Signal word : Danger

Hazardous warnings : May be corrosive to metals.
May be fatal if swallowed and enters airways.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Harmful if inhaled.

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Hazardous prevention measures

: Keep only in original container.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
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 or doctor/ physician.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.
Store locked up.
Store in corrosive resistant stainless steel container with a resistant inner liner.
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

No applicable data available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Water	7732-18-5	60 - 70 %
Hydrochloric acid	7647-01-0	30 - 40 %

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SECTION 4. FIRST AID MEASURES

- | | |
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| General advice | : Remove from exposure, lie down. Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice. |
| Inhalation | : Move to fresh air. Keep patient warm and at rest. Artificial respiration and/or oxygen may be necessary. Call a physician immediately. |
| Skin contact | : Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. Call a physician immediately. |
| Eye contact | : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Ingestion | : Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. If possible drink milk afterwards. Call a physician immediately. |
| Most important symptoms/effects, acute and delayed | : Lachrymation Shortness of breath Pain sweating Erythema Skin disorders corrosive effects |
| Protection of first-aiders | : No applicable data available. |
| Notes to physician | : Risk of product entering the lungs on vomiting after ingestion. Do not give adrenaline or similar drugs. Administer repeated doses of glucocorticoid aerosol and ensure that they are deeply inhaled. Later control for pneumonia and lung oedema. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
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| Suitable extinguishing media | : The product itself does not burn., Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : No applicable data available. |

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- Specific hazards : Hazardous decomposition products formed under fire conditions. Hazardous decomposition products may include: Hydrogen chloride gas
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.
- Further information : Will react with most metals, releasing potentially explosive hydrogen gas. Cool containers/tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Ventilate the area. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent further leakage or spillage. Try to prevent the material from entering drains or water courses. Prevent spreading over a wide area (e.g. by containment or oil barriers). Prevent material from entering sewers, waterways, or low areas. Should not be released into the environment.
- Spill Cleanup : Suppress (knock down) gases/vapours/mists with a water spray jet. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dispose of in an approved container. Dispose of in accordance with local regulations. Small amounts: Neutralize with lime milk or soda and flush with plenty of water.
- Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Avoid contact with skin, eyes and clothing. Avoid breathing mist. Handle

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product only in closed system or provide appropriate exhaust ventilation at machinery. For personal protection see section 8.
Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

- Handling (Physical Aspects) : The product is not flammable. Contact with metals may lead to the formation of hydrogen and nitrous gases - explosion hazard.
- Dust explosion class : No applicable data available.
- Storage : Keep container tightly closed in a dry and well-ventilated place. Store in original container. Protect from contamination. Store in corrosive resistant polyethylene container with a resistant inner liner. Store in corrosive resistant polypropylene container with a resistant inner liner. Store only in approved containers.
Alkali metals Oxidizing agents Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. No decomposition if stored and applied as directed.
- Storage period : No applicable data available.
- Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment
- Respiratory protection : For rescue and maintenance work in storage tanks use self-contained breathing apparatus. In case of mist or aerosol exposure wear suitable personal respiratory protection.
- Hand protection : Material: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
Glove thickness: 0.11 mm
Wearing time: 8 h
Additional protection: Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is

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used, such as the danger of cuts, abrasion, and the contact time.

Eye protection : Safety glasses with side-shields Additionally wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.

Skin and body protection : Complete suit protecting against chemicals.

Exposure Guidelines
Exposure Limit Values

Hydrochloric acid				
Permissible exposure limit:	(OSHA)	5 ppm	7 mg/m3	TLV-C
TLV	(ACGIH)	2 ppm	TLV-C	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : liquid
Form : liquid
Color : colourless

Odor : stinging

Odor threshold : No applicable data available.

pH : < 1

Melting point/freezing point : Melting point/range
ca. -40 - -35 °C (-40 - -31 °F)

Boiling point/boiling range : Boiling point/boiling range
ca. 57 °C (135 °F)

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Flash point	: does not flash
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: Not applicable
Lower explosion limit	: No applicable data available.
Vapor pressure	: 13 - 22 hPa at 20 °C (68 °F)
Vapour density	: No applicable data available.
Density	: ca. 1.1 - 1.3 g/cm ³ at 20 °C (68 °F)
Specific gravity (Relative density)	: No applicable data available.
Water solubility	: completely miscible
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.
Phys-chem data	: No other data to be specially mentioned.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Exothermic reaction with bases.

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Chemical stability	: The product is chemically stable under recommended conditions of storage, use and temperature.
Possibility of hazardous reactions	: Corrosive in contact with metals Gives off hydrogen by reaction with metals. Exothermic reaction with bases. Heating can release hazardous gases. corrosive and irritating fumes Hydrogen chloride Chlorine
Conditions to avoid	: Will react with most metals, releasing potentially explosive hydrogen gas.
Incompatible materials	: Ammonia Amines Alkaline earth metals Bases Powdered metals Cyanides Light and/or alkaline metals Powdered metal salts strong oxidants Reacts with oxidizing agents, generating chlorine.
Hazardous decomposition products	: Hazardous decomposition products: Hydrogen, by reaction with metals, Hazardous thermal decomposition products may include:, Hydrogen chloride gas, Chlorine, Heating or fire can release toxic gas.

SECTION 11. TOXICOLOGICAL INFORMATION

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Further information	: Vapours may cause irritation to the eyes, respiratory system and the skin. Inhalation of vapours in high concentration may cause shortness of breath (lung oedema). Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Hydrochloric acid Inhalation 4 h LC50	: 1 mg/l , Rat Target Organs: Respiratory Tract Respiratory tract irritation
Skin irritation	: Causes severe burns., Rabbit
Eye irritation	: Risk of serious damage to eyes., Rabbit

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Carcinogenicity : Not classifiable as a human carcinogen.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Hydrochloric acid

96 h LC50 : Lepomis macrochirus (Bluegill sunfish) 3.25 mg/l
72 h ErC50 : Chlorella vulgaris (Fresh water algae) 4.7 mg/l OECD Test Guideline 201
48 h EC50 : Daphnia magna (Water flea) 4.92 mg/l OECD Test Guideline 202

Environmental Fate

Hydrochloric acid

Bioaccumulation : Does not bioaccumulate.

Additional ecological information : Ecotoxic effect due to strong pH shift.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : If recycling is not practicable, dispose of in compliance with local regulations.

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SECTION 14. TRANSPORT INFORMATION

DOT	UN number	: 1789
	Proper shipping name	: Hydrochloric acid
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
	Reportable Quantity	: 5000 lbs Hydrogen chloride
IATA_C	UN number	: 1789
	Proper shipping name	: Hydrochloric acid
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
IMDG	UN number	: 1789
	Proper shipping name	: HYDROCHLORIC ACID
	Class	: 8
	Packing group	: II
	Labelling No.	: 8

SECTION 15. REGULATORY INFORMATION

TSCA	: Listed
SARA 313 Regulated Chemical(s)	: Hydrochloric acid
PA Right to Know Regulated Chemical(s)	: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Hydrochloric acid...%

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NJ Right to Know Regulated Chemical(s)	: Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Hydrochloric acid...%
CERCLA Reportable Quantity	: 15152 lbs Based on the percentage composition of this chemical in the product.: Hydrochloric acid...%
SARA Reportable Quantity	: 15152 lbs Based on the percentage composition of this chemical in the product.: Hydrochloric acid...%
California Prop. 65	: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

SECTION 16. OTHER INFORMATION

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Revision Date : 12/10/2015

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Significant change from previous version is denoted with a double bar.

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For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

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