

Univar USA Inc Material Safety Data Sheet

| MSDS No: | 1000003 |
|-------------|----------------|
| Version No: | 002 2015-04-29 |
| Order No: | |

Univar USA Inc., 17425 NE Union Hill Rd., Redmond WA 98052 (425) 889 3400

Emergency Assistance

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



425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: HYDROCHLORIC ACID SOLUTION 2% - 37%

Other means of identification

SDS number: 00010000003

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard classification

| Acut | e toxicity (Oral) | Category 4 |
|-------|-------------------------------|-------------|
| Acut | e toxicity (Dermal) | Category 4 |
| Skin | corrosion/irritation | Category 1A |
| Serio | ous eye damage/eye irritation | Category 1 |
| | | |

Label elements

Hazard symbol







| Signal word | Danger |
|-------------------------|---|
| Hazard statement | Corrosive. Causes severe skin burns and eye damage. Harmful if swallowed or in contact with skin. May cause respiratory irritation. |
| Precautionary statement | |
| Prevention | Do not breathe dust or mists. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Keep only in original container. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. |
| Response | IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse. |
| Storage | Store in a closed container. Store locked up. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. |
| Disposal | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |

Version: 1.1 Revision date: 04/29/2015



Other hazards which do not None. result in GHS classification

3. Composition/information on ingredients

Substances

| Chemical identity | Common name and synonyms | CAS number | Content in percent (%)* |
|-------------------|-----------------------------|------------|-------------------------|
| Water | | 7732-18-5 | >=63 - <=98% |
| Hydrochloric acid | | 7647-01-0 | >=2 - <=37% |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

| 4. First-aid measures | |
|---------------------------|--|
| Ingestion: | Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately. |
| Inhalation: | Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately. |
| Skin contact: | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. |
| Eye contact: | If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. |
| Most important symptoms | /effects, acute and delayed |
| Symptoms: | No data available. |
| ndication of immediate me | dical attention and special treatment needed |
| Treatment: | No data available. |
| 5. Fire-fighting measures | 8 |
| General fire hazards: | No data available. |

Suitable (and unsuitable) extinguishing media

| Suitable extinguishing | Use fire-extinguishing media appropriate for surrounding materials. |
|------------------------|---|
| media: | |





| Unsuitable extinguishing media: | No data available. |
|--|--|
| Specific hazards arising from the chemical: | No data available. |
| Special protective equipment and | precautions for firefighters |
| Special fire fighting procedures: | No data available. |
| Special protective equipment for fire-fighters: | Containers close to fire should be removed or cooled with water. |
| 6. Accidental release measures | \$ |
| | |
| Personal precautions, protective equipment and emergency procedures: | Use personal protective equipment. Keep unauthorized personnel away. |
| Methods and material for containment and cleaning up: | Absorb spillage with non-combustible, absorbent material. Dike for later disposal. |
| 7. Handling and storage | |
| Precautions for safe handling: | Use personal protective equipment as required. Container must be kept tightly closed. Use only with adequate ventilation. Avoid breathing mists or vapors. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Do not taste or swallow. |
| Conditions for safe storage, including any incompatibilities: | No data available. |

Version: 1.1 Revision date: 04/29/2015





8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Chemical identity | Туре | Exposure Lir | nit values | Source |
|-------------------|---------------|--------------|--------------|--|
| Hydrochloric acid | Ceiling | 2 ppm | | US. ACGIH Threshold Limit Values (03 2013) |
| | Ceil_Tim e | 5 ppm | 7 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2010) |
| | Ceiling | 5 ppm | 7 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| | Ceiling | 5 ppm | 7 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | Ceiling | 5 ppm | 7 mg/m3 | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008) |
| | AN ESL | | 8.4 μg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | ST ESL | | 190 µg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | AN ESL | | 5.7 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | ST ESL | | 130 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | Ceiling | 5 ppm | 7 mg/m3 | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012) |

Appropriate engineering No data available.

Version: 1.1 Revision date: 04/29/2015





Individual protection measures, such as personal protective equipment

| General information: | Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping. Provide eyewash station and safety shower. | | |
|----------------------------------|---|--|--|
| Eye/face protection: | No data available. | | |
| Skin protection | | | |
| Hand protection: | No data available. | | |
| Other: | No data available. | | |
| Respiratory protection: | No data available. | | |
| Hygiene measures: | No data available. | | |
| Physical and chamical properties | | | |

9. Physical and chemical properties

| Physical state: | Liquid | | |
|---|--------------------|--|--|
| Form: | No data available. | | |
| Color: | No data available. | | |
| Odor: | No data available. | | |
| Odor threshold: | No data available. | | |
| pH: | 2 | | |
| Melting point/freezing point: | -3415 °C | | |
| Initial boiling point and boiling range: | 60 - 105 °C | | |
| Flash Point: | No data available. | | |
| Evaporation rate: | No data available. | | |
| Flammability (solid, gas): | No data available. | | |
| Upper/lower limit on flammability or explosive limits | | | |
| Flammability limit - upper (%): | No data available. | | |
| Flammability limit - lower (%): | No data available. | | |
| Explosive limit - upper (%): | No data available. | | |
| Explosive limit - lower (%): | No data available. | | |
| Vapor pressure: | No data available. | | |
| Vapor density: | No data available. | | |
| Relative density: | No data available. | | |
| | | | |

Version: 1.1 Revision date: 04/29/2015

MSDS NO:1000003 VERSION:002 2015-04-29



| Solubility(ies) | |
|--|--------------------|
| Solubility in water: | No data available. |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |
| Viscosity: | No data available. |

10. Stability and reactivity

| Reactivity: | No data available. | |
|-------------------------------|--------------------|--|
| Chemical stability: | No data available. | |
| Possibility of hazardous | No data available. | |
| reactions: | | |
| Conditions to avoid: | No data available. | |
| Incompatible materials: | No data available. | |
| Hazardous decomposition | No data available. | |
| products: | | |
| 11. Toxicological information | n | |
| | | |

| Symptoms related to the physical, chemical and toxicological characteristics | | |
|--|------------------------------|--|
| Ingestion: | No data available. | |
| Inhalation: | No data available. | |
| Skin contact: | No data available. | |
| Eye contact: | No data available. | |
| Information on toxicological effec | ts | |
| Acute toxicity (list all possible r | outes of exposure) | |
| Oral | | |
| Product: | ATEmix (): 900 mg/kg | |
| Dermal | | |
| Product: | ATEmix (): 1,449 mg/kg | |
| | | |
| Inhalation | | |
| Product: | No data available. | |
| Specified substance(s): | | |
| Hydrochloric acid | LC 50 (Rat, 1 h): 3,124 mg/l | |
| Repeated dose toxicity | | |
| Product: | No data available. | |
| SDS_US - 00010000003 | | |

Version: 1.1 Revision date: 04/29/2015





| Skin corrosion/irritation | |
|---------------------------------------|--|
| Product: | No data available. |
| Serious eye damage/eye irritatior | 1 |
| Product: | No data available. |
| Respiratory or skin sensitization | |
| Product: | No data available. |
| Carcinogenicity | |
| Product: | No data available. |
| IARC Monographs on the Ev | valuation of Carcinogenic Risks to Humans: |
| No carcinogenic component | s identified |
| | |
| US. National Toxicology Pro | gram (NTP) Report on Carcinogens: |
| No carcinogenic component | s identified |
| | ated Substances (29 CFR 1910.1001-1050): |
| No carcinogenic component | s identified |
| Germ cell mutagenicity | |
| In vitro | |
| Product: | No data available. |
| In vivo | |
| Product: | No data available. |
| Reproductive toxicity | |
| Product: | No data available. |
| Specific target organ toxicity - sing | gle exposure |
| Product: | No data available. |
| Specific target organ toxicity - rep | eated exposure |
| Product: | No data available. |
| Aspiration hazard | |
| Product: | No data available. |
| Other effects: | No data available. |
| | |

12. Ecological information

| Ecotoxicity: Acute hazards to the aquatic en Fish | nvironment: |
|---|---|
| Product: | No data available. |
| Specified substance(s): | |
| Hydrochloric acid | LC 50 (Western mosquitofish (Gambusia affinis), 24 h): 282 mg/l Mortality |
| | LC 50 (Western mosquitofish (Gambusia affinis), 48 h): 282 mg/l Mortality |
| | LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 282 mg/l Mortality |

Version: 1.1 Revision date: 04/29/2015





| Aquatic invertebrates | | |
|---|--|--|
| Product: | No data available. | |
| Specified substance(s): | | |
| Hydrochloric acid | LC 50 (Green or European shore crab (Carcinus maenas), 48 h): 240 mg/l | |
| | Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 260 mg/l Mortality | |
| Chronic hazards to the aquatic | environment: | |
| Fish | | |
| Product: | No data available. | |
| Aquatic invertebrates | | |
| Product: | No data available. | |
| Toxicity to Aquatic Plants | | |
| Product: | No data available. | |
| Persistence and degradability | | |
| Biodegradation | | |
| Product: | No data available. | |
| BOD/COD ratio | | |
| Product: | No data available. | |
| Bioaccumulative potential | | |
| Bioconcentration factor (BCF) | | |
| Product: | No data available. | |
| Partition coefficient n-octano | l / water (log Kow) | |
| Product: | No data available. | |
| Mobility in soil: | No data available. | |
| Known or predicted distribution to environmental compartments | | |
| Water | No data available. | |
| Hydrogen chloride | No data available. | |
| Known or predicted distribut | ion to environmental compartments | |
| Water | No data available. | |
| | | |

13. Disposal considerations

Disposal instructions:No dataContaminated packaging:No data

No data available. No data available.

Version: 1.1 Revision date: 04/29/2015





| 14. Transport information | | |
|-------------------------------|----------------------------|--|
| DOT | | |
| UN number: | UN 1789 | |
| UN proper shipping name: | Hydrochloric acid solution | |
| Transport hazard class(es) | | |
| Class: | 8 | |
| Label(s): | 8 | |
| Packing group: | П | |
| Marine Pollutant: | Not regulated. | |
| Special precautions for user: | _ | |

15. Regulatory information

US federal regulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Hydrochloric acid Reportable quantity: 5000 lbs.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

Not listed.





| Chemical identity | RQ | Threshold Planning Quantity | |
|-------------------------------|------------------------|-------------------------------|--|
| Hydrochloric acid | 5000 lb: | s. 500 lbs. | |
| SARA 304 Emergency rele | ase notification | | |
| Chemical identity | RQ | | |
| Hydrochloric acid | 5000 lbs | 5. | |
| SARA 311/312 Hazardous | chemical | | |
| Chemical identity | Threshold Plannin | g Quantity | |
| Hydrochloric acid | | 500lbs | |
| SARA 313 (TRI reporting) | | | |
| | Reporting | | |
| | threshold for | Reporting threshold for | |
| Chemical identity | other users | manufacturing and processing | |
| Hydrochloric acid | 10000 lbs | 25000 lbs. | |
| Clean Water Act Section 311 H | lazardous Substances | (40 CFR 117.3) | |
| Hydrochloric acid | Reportable quanti | ty: 5000 lbs. | |
| | •• | e Prevention (40 CFR 68.130): | |
| Hydrochloric acid | | Threshold quantity: 15000 lbs | |
| Hydrochloric acid | Threshold quantity | Threshold quantity: 5000 lbs | |
| state regulations | | | |
| US. California Proposition | | | |
| | lated by CA Prop 65 pr | | |
| US. New Jersey Worker ar | | o-Know Act | |
| Hydrochloric acid | Listed | | |
| US. Massachusetts RTK - S | | | |
| Hydrochloric acid | Listed | | |
| US. Pennsylvania RTK - Ha | | | |
| Hydrochloric acid | Listed | | |
| US. Rhode Island RTK | | | |
| Hydrochloric acid | Listed | | |

Version: 1.1 Revision date: 04/29/2015

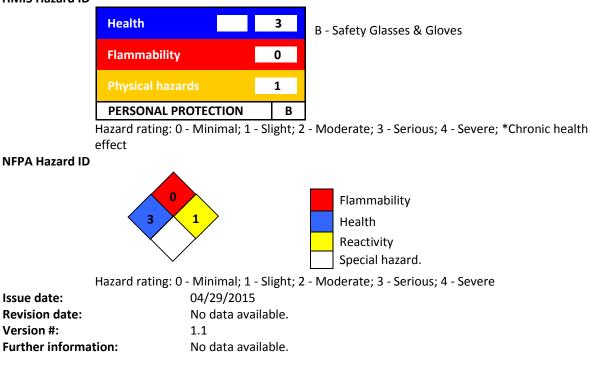




| Inventory Status: Australia AICS: | Not in compliance with the inventory. |
|---|--|
| Canada DSL Inventory List: | Not in compliance with the inventory. |
| EU EINECS List: | On or in compliance with the inventory |
| EU ELINCS List: | Not in compliance with the inventory. |
| Japan (ENCS) List: | Not in compliance with the inventory. |
| EU No Longer Polymers List: | Not in compliance with the inventory. |
| China Inv. Existing Chemical Substances: | Not in compliance with the inventory. |
| Korea Existing Chemicals Inv. (KECI): | Not in compliance with the inventory. |
| Canada NDSL Inventory: | Not in compliance with the inventory. |
| Philippines PICCS: | Not in compliance with the inventory. |
| US TSCA Inventory: | On or in compliance with the inventory |
| New Zealand Inventory of Chemicals: | Not in compliance with the inventory. |
| Japan ISHL Listing: | Not in compliance with the inventory. |
| Japan Pharmacopoeia Listing: | Not in compliance with the inventory. |
| 16 Other information including date of pr | enaration or last revision |

16.Other information, including date of preparation or last revision

HMIS Hazard ID







Univar USA Inc Material Safety Data Sheet

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

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