Safety Data Sheet
acc. to OSHA HCS

Printing date 04/23/2025 Reviewed on 04/23/2025

1 Identification

*Product identifier
*Trade name: Conductivity Standard 500,000 µS/cm @25°C

*Article number: 31049543
*Application of the substance / the mixture Laboratory chemicals

*Details of the supplier of the safety data sheet
*Manufacturer/Supplier: See Below
*Manufacturer:
Reagecon Diagnostics Ltd.
Shannon Free Zone,
Shannon,
Co. Clare,
Ireland.
Tel +353 61 472622
Fax +353 61 472642
*Supplier:
Mettler-Toledo GmbH
Im Langacher 44
CH-8606 Greifensee
Switzerland
Tel: +41 22 567 53 22
Fax: +41 22 567 53 23
Email: msganachem@mt.com

*Information department: sds@reagecon.ie
*Emergency telephone number:
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC
For Ireland call +(353)-19014670
For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

2 Hazard(s) identification

*Classification of the substance or mixture



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Skin Irritation 2 H315 Causes skin irritation.
Specific Target Organ Toxicity - Single Exposure 3 H335 May cause respiratory irritation.

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

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Trade name: Conductivity Standard 500,000 µS/cm @25°C

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***Hazard pictograms**



GHS05 GHS07

***Signal word** Danger

***Hazard-determining components of labeling:**
hydrochloric acid 37%
***Hazard statements**
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
***Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves / eye protection / face protection.
If on skin: Wash with plenty of water.
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.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
***Classification system:**
***NFPA ratings (scale 0-4)**



Health = 3
Fire = 0
Reactivity = 0

***Other hazards**
***Results of PBT and vPvB assessment**
***PBT:** Not applicable.
***vPvB:** Not applicable.

3 Composition/information on ingredients

***Chemical characterization: Mixtures**
***Description:** Mixture of the substances listed below with nonhazardous additions.

***Dangerous components:**		
CAS: 7647-01-0	hydrochloric acid 37%	≥10-<25%

***Non- Hazardous Components**		
CAS: 7732-18-5	PURIFIED WATER	50-100%

US

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4 First-aid measures

***Description of first aid measures**
***General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
***After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
***After skin contact:** Immediately wash with water and soap and rinse thoroughly.
***After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
***After swallowing:** Do not induce vomiting; immediately call for medical help.
***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.

5 Fire-fighting measures

***Extinguishing media**
***Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
***Special hazards arising from the substance or mixture** No further relevant information available.
***Advice for firefighters**
***Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

***Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
***Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
***Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
***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.
***Protective Action Criteria for Chemicals**

*PAC-1:
None of the ingredients is listed.

*PAC-2:
None of the ingredients is listed.

*PAC-3:
None of the ingredients is listed.

US

(Contd. on page 4)

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7 Handling and storage

*Handling:
*Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
*Information about protection against explosions and fires: No special measures required.

*Conditions for safe storage, including any incompatibilities
*Storage:
*Requirements to be met by storerooms and receptacles: No special requirements.
*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 limit values that require monitoring at the workplace:
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 were used as basis.

*Exposure controls
*Personal protective equipment:
*General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
*Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Suitable respiratory protective device recommended.
*Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
*Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Nitrile rubber, NBR
*Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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***Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

***Information on basic physical and chemical properties**	
***General Information**	
***Appearance:**	
Form:	Liquid
Color:	According to product specification
***Odor:**	Characteristic
***Odor threshold:**	Not determined.
***pH-value:**	Not determined.
***Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
***Flash point:**	Not applicable.
***Flammability:**	Not applicable.
***Decomposition temperature:**	Not determined.
***Ignition temperature:**	Product is not selfigniting.
***Danger of explosion:**	Product does not present an explosion hazard.
***Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
***Vapor pressure at 20 °C (68 °F):**	23 hPa (17.3 mm Hg)
***Density at 20 °C (68 °F):**	1.06935 g/cm³ (8.92373 lbs/gal)
***Relative density**	Not determined.
***Vapor density**	Not determined.
***Evaporation rate**	Not determined.
***Solubility in / Miscibility with**	
Water:	Fully miscible.
***Partition coefficient (n-octanol/water):**	Not determined.
***Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
***Solvent content:**	
Water:	83.8 %
Solids content:	0.0 %
***Other information**	No further relevant information available.

10 Stability and reactivity

***Reactivity** No further relevant information available.

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*Chemical stability
*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: No further relevant information available.
*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:		
CAS: 7647-01-0 hydrochloric acid 37%		
Dermal	LD50	900 mg/kg (rabbit)

*Primary irritant effect:
*on the skin: Strong caustic effect on skin and mucous membranes.
*on the eye: Strong caustic effect.
*Sensitization: No sensitizing effects known.
*Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

*Carcinogenic categories

*IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

*NTP (National Toxicology Program)
None of the ingredients is listed.

*OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

*Toxicity
*Aquatic toxicity: No further relevant information available.
*Persistence and degradability No further relevant information available.
*Behavior in environmental systems:
*Bioaccumulative potential No further relevant information available.
*Mobility in soil No further relevant information available.
*Additional ecological information:
*General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
*Results of PBT and vPvB assessment
*PBT: Not applicable.
*vPvB: Not applicable.

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***Other adverse effects** No further relevant information available.

13 Disposal considerations

***Waste treatment methods**
***Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

***Uncleaned packagings:**
***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, IMDG, IATA**	UN1789
***UN proper shipping name**	
***DOT**	Hydrochloric acid solution
***ADR**	1789 HYDROCHLORIC ACID solution
***IMDG, IATA**	HYDROCHLORIC ACID solution
***Transport hazard class(es)**	
***DOT**	



***Class**	8 Corrosive substances
***Label**	8
***ADR, IMDG, IATA**	



***Class**	8 Corrosive substances
***Label**	8
***Packing group**	
***DOT, ADR, IMDG, IATA**	II
***Environmental hazards:**	Not applicable.
***Special precautions for user**	Warning: Corrosive substances
***Hazard identification number (Kemler code):**	80
***EMS Number:**	F-A,S-B
***Segregation groups**	(SGG1) Acids
***Stowage Category**	C
***Segregation Code**	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

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***UN "Model Regulation":**	*UN 1789 HYDROCHLORIC ACID SOLUTION, 8, II*

15 Regulatory information

***Safety, health and environmental regulations/legislation specific for the substance or mixture**

***SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

***SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

***TSCA (Toxic Substances Control Act)**

CAS: 7732-18-5	*PURIFIED WATER*	*ACTIVE*

***Hazardous Air Pollutants**

None of the ingredients is listed.

***Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

***Cancerogenity categories**

***EPA (Environmental Protection Agency)**

None of the ingredients is listed.

***TLV (Threshold Limit Value)**

None of the ingredients is listed.

***MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

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

None of the ingredients is listed.

***GHS label elements**

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

***Hazard pictograms**



GHS05 GHS07

***Signal word** Danger

***Hazard-determining components of labeling:**

hydrochloric acid 37%

***Hazard statements**

Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

***Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves / eye protection / face protection.
If on skin: Wash with plenty of water.
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.

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Immediately call a poison center/doctor.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

***National regulations:**

***Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.*
***Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

***Department issuing SDS:** Health and Safety*
***Contact:** sds@reagecon.ie*
***Date of preparation / last revision** 04/23/2025 / -*
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
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)
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
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3