

SAFETY DATA SHEET

Washing Solution for Coagulation Analyzers

SIEMENS
Healthineers 

SDS no.:

mrhm0216

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

1.1 Product identifier

Product name : Washing Solution for Coagulation Analyzers
Product code : OWZC39, 10446684

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

Identified uses Diagnostic agents.
Restrictions on use For professional users only.

Supplier : Siemens Healthcare Diagnostics Limited
 Park View,
 Watchmoor Park,
 Camberley,
 Surrey,
 GU15 3YL
 United Kingdom
 Phone: +44 (0) 345 600 1955
e-mail address of person responsible for this SDS : dx.msds.healthcare@siemens-healthineers.com

1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Met. Corr. 1, H290
 Eye Irrit. 2, H319

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
 See Section 16 for the full text of the H statements declared above.
 See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning
Hazard statements : H290 - May be corrosive to metals.
 H319 - Causes serious eye irritation.

Precautionary statements

Prevention : P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P234 - Keep only in original container.
Response : P337 + P313 - If eye irritation persists: Get medical advice/attention.
 P390 - Absorb spillage to prevent material damage.

SECTION 2: Hazards identification

Storage	: Not applicable.
Disposal	: Not applicable.
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.
Additional information	: Not available. Not available.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
hydrogen chloride	EC: 231-595-7 CAS: 7647-01-0 Index: 017-002-00-2	≤0.3	Press. Gas (Comp.), H280 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Irrit. 2, H319 See Section 16 for the full text of the H statements declared above.	[1] [2]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures**4.1 Description of first aid measures**

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed**Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : No specific data.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Separate from alkalis. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

SECTION 7: Handling and storage**Recommendations** : Not available.**Industrial sector specific solutions** : Not available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

Product/ingredient name	Exposure limit values
hydrogen chloride	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 8 mg/m ³ 15 minutes. Form: (gas and aerosol mists) STEL: 5 ppm 15 minutes. Form: (gas and aerosol mists) TWA: 2 mg/m ³ 8 hours. Form: (gas and aerosol mists) TWA: 1 ppm 8 hours. Form: (gas and aerosol mists)

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
hydrogen chloride	DNEL	Long term Inhalation	8 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	15 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	8 mg/m ³	General population	Local
	DNEL	Short term Inhalation	15 mg/m ³	General population	Local

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

SECTION 8: Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties**Appearance**

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Odourless.
- Odour threshold** : Not relevant/applicable due to nature of the product.
- Melting point/freezing point** : Not relevant/applicable due to nature of the product.
- Softening point** : Not relevant/applicable due to nature of the product.
- Sublimation temperature** : Not relevant/applicable due to nature of the product.
- Initial boiling point and boiling range** : Not available.
- Flammability (solid, gas)** : Not relevant/applicable due to nature of the product.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : [Product does not sustain combustion.]
- Decomposition temperature** : Not relevant/applicable due to nature of the product.
- pH** : <2
- Viscosity** : Not available.
- Solubility(ies)** :
Not available.

Solubility in water : Not relevant/applicable due to nature of the product.

Miscible with water : Not relevant/applicable due to nature of the product.

Partition coefficient: n-octanol/ water : Not relevant/applicable due to nature of the product.

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
hydrogen chloride	30780.09	4103.7				

Evaporation rate : Not relevant/applicable due to nature of the product.

Relative density : 1

Vapour density : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

SECTION 9: Physical and chemical properties**Particle characteristics****Median particle size** : Not applicable.**Fire point** : Not available.**Burning time** : Not relevant/applicable due to nature of the product.**Fundamental burning velocity** : Not relevant/applicable due to nature of the product.**Burning rate** : Not relevant/applicable due to nature of the product.**SADT** : Not relevant/applicable due to nature of the product.**SAPT** : Not relevant/applicable due to nature of the product.**Heat of reaction** : Not relevant/applicable due to nature of the product.**Heat of combustion** : Not relevant/applicable due to nature of the product.**Flow time (ISO 2431)** : Not relevant/applicable due to nature of the product.**Molecular weight** : Not relevant/applicable due to nature of the product.**SECTION 10: Stability and reactivity****10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.**10.2 Chemical stability** : The product is stable.**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.**10.4 Conditions to avoid** : No specific data.**10.5 Incompatible materials** : Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Reactive or incompatible with the following materials:
alkalis
metals**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Conclusion/Summary** : Not available.**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
hydrogen chloride	N/A	N/A	N/A	3	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrogen chloride	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
	Skin - Mild irritant	Human	-	5 mg 24 hours 4 %	-

Conclusion/Summary : Not available.**Sensitisation****Conclusion/Summary** : Not available.

SECTION 11: Toxicological information**Mutagenicity**

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Short term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

SECTION 11: Toxicological information**Other information** : Not available.**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
hydrogen chloride	Acute LC50 240000 µg/l Marine water	Crustaceans - Green crab - Carcinus maenas - Adult	48 hours
	Acute LC50 282 ppm Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours

Conclusion/Summary : Not available.**12.2 Persistence and degradability****Conclusion/Summary** : Not available.**12.3 Bioaccumulative potential**

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrogen chloride	0.25	-	low

12.4 Mobility in soil**Soil/water partition coefficient (K_{oc})** : Not available.**Mobility** : Not available.**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.


Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging


Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.


SECTION 14: Transport information**ADR/RID**

14.1 UN number	UN1789
14.2 UN proper shipping name	HYDROCHLORIC ACID
14.3 Transport hazard class(es)	8
	
14.4 Packing group	III
14.5 Environmental hazards	No.
Additional information	-

ADN

14.1 UN number	UN1789
14.2 UN proper shipping name	HYDROCHLORIC ACID
14.3 Transport hazard class(es)	8
	
14.4 Packing group	III
14.5 Environmental hazards	No.
Additional information	-

IMDG

14.1 UN number	UN1789
14.2 UN proper shipping name	HYDROCHLORIC ACID
14.3 Transport hazard class(es)	8
	
14.4 Packing group	III
14.5 Environmental hazards	No.
Additional information	-

SECTION 14: Transport information**IATA****14.1 UN number** UN1789**14.2 UN proper shipping name** HYDROCHLORIC ACID**14.3 Transport hazard class(es)** 8**14.4 Packing group** III**14.5 Environmental hazards** No.**Additional information** -

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK (GB) /REACH****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations**EU regulations**

SECTION 15: Regulatory information

**Industrial emissions
(integrated pollution
prevention and control) -
Air** : Not listed

**Industrial emissions
(integrated pollution
prevention and control) -
Water** : Not listed

International regulations**Montreal Protocol**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**15.2 Chemical safety
assessment** : Not applicable.

SECTION 16: Other information

▀ Indicates information that has changed from previously issued version.

**Abbreviations and
acronyms** : ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Met. Corr. 1, H290 Eye Irrit. 2, H319	Expert judgment Expert judgment

Full text of abbreviated H statements

H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

Full text of classifications

SECTION 16: Other information

Acute Tox. 3	ACUTE TOXICITY - Category 3
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.