Printing date 07/11/2023 Reviewed on 07/11/2023

#### 1 Identification

- · Product identifier
- · Product Name: Hydrochloric Acid Blank
- · Part Name: PLBLK-HCL
- $\cdot \textbf{\textit{Application of the substance / the mixture}} \ \textit{Certified Reference Material}$
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Spex CertiPrep, LLC.

203 Norcross Ave, Metuchen,

NJ 08840 USA 732-549-7144

USMet-CRMSales@antylia.com

- · Information department: product safety department
- · Emergency telephone number:

Emergency Phone Number (24 hours)

CHEMTREC (800-424-9300)

Outside US: 703-527-3887

# 2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

hydrochloric acid

- · Hazard statements
- H318 Causes serious eye damage.
- · Precautionary statements

P280 Wear eye protection / face protection.

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.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*3 Fire = 0Reactivity = 0

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

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- $\cdot \textit{Description:} \ \textit{Mixture of the substances listed below with nonhazardous additions}.$



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	(Contd. of page 1)
· Dangerous components:	
7647-01-0 hydrochloric acid	5.0%
· Chemical identification of the substance/preparation	
7732-18-5 water, distilled, conductivity or of similar purity	95.0%

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · 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: No special measures required.

#### 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.

· 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:	
7647-01-0 hydrochloric acid	1.8 ppm
· PAC-2:	
7647-01-0 hydrochloric acid	22 ppm
· PAC-3:	
7647-01-0 hydrochloric acid	100 ppm

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · 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.

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#### · Control parameters

· Com	· Components with limit values that require monitoring at the workplace:	
7647	7647-01-0 hydrochloric acid	
PEL	Ceiling limit value: 7 mg/m³, 5 ppm	
REL	Ceiling limit value: 7 mg/m³, 5 ppm	
	Ceiling limit value: 2 ppm	
	A4	

- · 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.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Not applicable.

23 hPa (17.3 mm Hg)

1.0075 g/cm3 (8.40759 lbs/gal)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- · Eye protection:



Upper:

· Vapor pressure at 20 °C (68 °F):

· Density at 20 °C (68 °F)

Tightly sealed goggles

# 9 Physical and chemical properties

, <u> </u>		
· Information on basic physical and chemical properties · General Information		
· Appearance:		
Form:	Liquid	
Color:	According to product specification	
· Odor:	Characteristic	
· Odour Threshold:	Not applicable.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Decomposition temperature:	Not applicable.	
· Ignition temperature:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not applicable.	
	37 10 11	

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		(Contd. of page 3)
· Relative density	Not applicable.	
· Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octano	l/water): Not applicable.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Water:	95.0 %	
VOC content:	0.00 %	
Solids content:	0.0 %	
· Other information	No further relevant information available.	

### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
7647-01-0 hydrochloric acid	3
· 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.
- · Other adverse effects No further relevant information available.

(Contd. on page 5)



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## 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.

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14	Trans	port	uni	ormai	aren en e

· UN-Number · DOT, ADR, IMDG, IATA	UN1789
· UN proper shipping name · DOT · ADR · IMDG, IATA	Hydrochloric acid 1789 HYDROCHLORIC ACID HYDROCHLORIC ACID

- · Transport hazard class(es)
- $\cdot DOT$



· Class
· Label
8 Corrosive substances
8

· ADR, IMDG, IATA



· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT, ADR, ÎMDG, 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.
· Transport/Additional information:	
$\cdot ADR$	
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· <i>IMDG</i>	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
• • • • • • • • • • • • • • • • • • • •	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml

UN 1789 HYDROCHLORIC ACID, 8, II

## 15 Regulatory information

· UN "Model Regulation":

 $\cdot \textbf{\textit{Safety, health and environmental regulations/legislation specific for the substance or \textit{mixture}} \ \textit{No further relevant information available}.$ 



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· Sara

· Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

7647-01-0 hydrochloric acid

**Proposition 65** 

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

7647-01-0 hydrochloric acid

*A4* 

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

- · Signal word Danger
- · Hazard-determining components of labeling:

hydrochloric acid

· Hazard statements

H318 Causes serious eye damage.

· Precautionary statements

P280 Wear eye protection / face protection.

P305+P351+P338 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.

· 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: product safety department

Spex CertiPrep, LLC. 1-732-549-7144

· Date of preparation / last revision 07/11/2023

· 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) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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



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PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Eye Damage 1: Serious eye damage/eye irritation – Category 1