

according to Regulation (EC) No 1907/2006

Pt/Co standard reference solution color index (Hazen) 200 Hazen color standard according to EN ISO 6							
Revision date: 19.03.2024	Product code: 2169	5	Page 1 of 10				
SECTION 1: Identification of the s	ubstance/mixture and of the com	pany/undertaking					
1.1. Product identifier							
Pt/Co standard reference soluti	on color index (Hazen) 200 Hazen colo	r standard according to EN ISO 6					
UFI:	CM2X-T16F-700H-TARV						
1.2. Relevant identified uses of the second	ubstance or mixture and uses advise	<u>d against</u>					
Use of the substance/mixture Laboratory chemicals Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen)							
Uses advised against							
Do not use for private purposes	(household).						
<u>1.3. Details of the supplier of the safe</u> Company name: Street: Place:	ety data sheet AnalytiChem GmbH ACD Stempelstraße 6 D-47167 Duisburg						
Telephone: E-mail: Contact person:	0203/5194-0 info@analytichem.de Abteilung Produktsicherheit	Telefax: 0203/5194-290 Telephone: 0203/5194-107/117					
E-mail: Internet: Responsible Department:	produktsicherheit@analytichem.de www.analytichem.de Abteilung Produktsicherheit	·					
1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, number: Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)							
Further Information This product is a mixture. REA0	CH Registration Number see section 3.						

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 Met. Corr. 1; H290

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H290

May be corrosive to metals.

Precautionary statements P234

Keep only in original packaging.



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P390 P406	Absorb spillage to prevent material damage. Store in a corrosion-resistant container with a resistant inner liner.				

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name			
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7647-01-0	Hydrochloric acid			
	231-595-7	017-002-01-X	01-2119484862-27	
	Skin Corr. 1B, STOT S	E 3; H314 H335		

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. I	imits, M-factors and ATE	
7647-01-0	231-595-7	Hydrochloric acid	1 - < 5 %
	· · · ·	l314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 3; H335: >= 10 - 100	

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.



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4.2. Most important symptoms and effects, both acute and delayed

Irritant Allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Hydrochloric gas Metal oxide smoke, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. Avoid contact with skin, eyes and clothes.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Corrosive to metals.

For non-emergency personnel

Provide adequate ventilation.

- Use personal protection equipment.
- Avoid contact with skin, eyes and clothes.
- Remove persons to safety.
- Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7



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Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation.

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Further information on storage conditions

Unsuitable container/equipment material: Metal

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
7647-01-0	Hydrogen chloride	5	8		TWA (8 h)	
		10	15		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance		_	
DNEL type		Exposure route	Effect	Value
7647-01-0	Hydrochloric acid			
Worker DNEL,	long-term	inhalation	local	8 mg/m³
Worker DNEL,	acute	inhalation	local	15 mg/m³
Consumer DNE	EL, long-term	inhalation	local	8 mg/m³
Consumer DNE	EL, acute	inhalation	local	15 mg/m³



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8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Face protection shield goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing. Protective clothing acid-resistant

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow
Odour:	odourless
Melting point/freezing point:	

No data available



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Boiling point or initial boiling point and boiling range:	No data available					
Flammability:	not applicable					
Lower explosion limits:	No data available					
Upper explosion limits:	No data available					
Flash point:	Х					
Auto-ignition temperature:	No data available					
Decomposition temperature:	No data available					
pH-Value:	acidic					
Viscosity / kinematic:	No data available					
Water solubility:	No data available					
Solubility in other solvents						
not determined						
Partition coefficient n-octanol/water:	No data available					
Vapour pressure:	No data available					
Vapour pressure:	No data available					
Density (at 20 °C):	No data available					
Bulk density:	No data available					
Relative vapour density:	No data available					
9.2. Other information						
Information with regard to physical hazard class						
Explosive properties	55					
No data available						
Self-ignition temperature						
Solid:	not applicable					
Gas:	not applicable					
Oxidizing properties						
No data available						
Other safety characteristics						
Evaporation rate:	No data available					
Solvent separation test:	No data available					
Solvent content:	No data available					
Solid content:	No data available					
Sublimation point:	No data available					
Softening point:	No data available					
Pour point:	No data available					
No data available:						
Viscosity / dynamic:	No data available					
Flow time:	No data available					
Further Information						
Corrosive to metals						

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

The product develops hydrogen in an aqueous solution in contact with metals.



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10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Keep away from: Metal.

The product develops hydrogen in an aqueous solution in contact with metals.

10.6. Hazardous decomposition products

In case of fire may be liberated:

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Based on available data, the classification criteria are not met. slightly irritant but not relevant for classification.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Other information

There are no data available on the mixture itself.

Further information

Irritant

SECTION 12: Ecological information

12.1. Toxicity



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Based on available data, the classification criteria are not met.

0	CAS No	Chemical name							
		Aquatic toxicity Dose			[h] [d]	Species	Source	Method	
7	7647-01-0	Hydrochloric acid							
		Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus			

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not empty into drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a physico-chemical treatment facility under observation of official regulations. Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1789
14.2. UN proper shipping name:	HYDROCHLORIC ACID
14.3. Transport hazard class(es):	8
14.4. Packing group:	111
Hazard label:	8
Classification code:	C1
Special Provisions:	520
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E
and waterways transport (ADN)	



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14.1. UN number or ID number:	UN 1789	
14.2. UN proper shipping name:	HYDROCHLORIC ACID	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Classification code:	C1	
Special Provisions:	520	
Limited quantity:	5 L	
Excepted quantity:	E1	
larine transport (IMDG)		
14.1. UN number or ID number:	UN 1789	
14.2. UN proper shipping name:	HYDROCHLORIC ACID	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	223	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	F-A, S-B	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	UN 1789	
14.2. UN proper shipping name:	HYDROCHLORIC ACID	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	
4.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
ECTION 15: Regulatory information		

2012/18/EU (SEVESO III): National regulatory information Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile'	
work protection guideline' (94/33/EC).	le
Water hazard class (D): non-hazardous to water	

SECTION 16: Other information



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Changes			
This data sheet contains cha	nges from the previous version in section(s): 1,9,12.		
(European Agreement conce IMDG: International Maritime IATA: International Air Transp GHS: Globally Harmonized S EINECS: European Inventory ELINCS: European List of No CAS: Chemical Abstracts Set LC50: Lethal concentration, 5 LD50: Lethal dose, 50%	an toxicity - single exposure transport des marchandises dangereuses par Route ning the International Carriage of Dangerous Goods by Road) Code for Dangerous Goods oort Association ystem of Classification and Labelling of Chemicals of Existing Commercial Chemical Substances tified Chemical Substances vice	3 ICLP1	
Classification	Classification procedure		
Met. Corr. 1; H290	On basis of test data		

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)