

## 1 Identification

### Product identifier

**Trade name:** Cleaning solution

**Synonym:** for CA7xAM/PH/NO/HY/CL/AL

**Article number:** CAY344-V10AAE

### Application of the substance / the mixture

*Cleaning agent/ Cleaner*

*Laboratory chemicals*

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

*Endress+Hauser Conducta Inc.*

*4123 E. La Palma Ave., Suite 200*

*Anaheim*

*CA 92807-1813*

*USA*

#### Information department:

*Phone: +49 (0)7156 209-10117*

*E-Mail: MSDS.PCC@endress.com*

**Emergency telephone number:** 001 18000 222 1222

## 2 Hazard(s) identification

### Classification of the substance or mixture



*GHS05 Corrosion*

*Skin Corrosion 1B H314 Causes severe skin burns and eye damage.*

*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

*Causes severe skin burns and eye damage.*

#### Precautionary statements

*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*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).*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

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## Trade name: Cleaning solution

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## Classification system:

## NFPA ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

## HMIS-ratings (scale 0 - 4)



Health = \*3

Fire = 0

Reactivity = 0

## Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

## Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## \* 3 Composition/information on ingredients

## Chemical characterization: Mixtures

Description: Cleansing agent

## Dangerous components:

CAS: 7647-01-0	hydrochloric acid	1-2.5%
	⚠ Skin Corrosion 1B, H314; Eye Damage 1, H318; ⚠ Acute Toxicity - Oral 4, H302; Specific Target Organ Toxicity - Single Exposure 3, H335	

Additional information: For the wording of the listed hazard phrases refer to section 16.

## 4 First-aid measures

## Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

**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:

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** no further information

**Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**Advice for firefighters** No further relevant information available.

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**Protective equipment:** *Mount respiratory protective device.***6 Accidental release measures****Personal precautions, protective equipment and emergency procedures***Mount respiratory protective device.**Wear protective equipment. Keep unprotected persons away.**Wear protective clothing.***Environmental precautions:** *Dilute with plenty of 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***No dangerous substances are released.**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:**

CAS: 7647-01-0	hydrochloric acid	1.8 ppm
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**PAC-2:**

CAS: 7647-01-0	hydrochloric acid	22 ppm
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**PAC-3:**

CAS: 7647-01-0	hydrochloric acid	100 ppm
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**7 Handling and storage****Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**Prevent formation of aerosols.***Information about protection against explosions and fires:***Keep respiratory protective device available.***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.***Storage class:** 8 B**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:****CAS: 7647-01-0 hydrochloric acid**

PEL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
REL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
TLV	Ceiling limit value: 2 ppm
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**Additional information:** *The lists that were valid during the creation were used as basis.*

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**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.***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.***Protection of hands:***Protective gloves**To avoid skin problems reduce the wearing of gloves to the required minimum.**Only use chemical-protective gloves with CE-labeling of category III.**The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.***Material of gloves***Nitrile rubber, NBR**Natural rubber, NR**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:***Tightly sealed goggles***Body protection:** *Protective work clothing***9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:***Fluid***Color:***Colorless***Odor:***Characteristic***Odor threshold:***Not determined.***pH-value at 20 °C (68 °F):***<2***Change in condition****Melting point/Melting range:***0 °C (32 °F)***Boiling point/Boiling range:***100 °C (212 °F)***Flash point:***Not applicable.***Flammability (solid, gaseous):***Not applicable.*

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Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard. Not determined.
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):	1.001 g/cm <sup>3</sup> (8.353 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:	>95.0 %
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:

LD/LC50 values that are relevant for classification:

CAS: 7647-01-0 hydrochloric acid

Oral LD50 900 mg/kg (rabbit)

## Primary irritant effect:

on the skin: Caustic effect on skin and mucous membranes.

on the eye:

Strong caustic effect.

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:

Corrosive

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**Irritant**

*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)		
CAS: 7647-01-0	hydrochloric acid	3

**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:**

*Not hazardous for water.*

*Must not reach bodies of water or drainage ditch undiluted or unneutralized.*

*Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.*

**Results of PBT and vPvB assessment**

**PBT:** *Not applicable.*

**vPvB:** *Not applicable.*

**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, IMDG, IATA

*Void*

UN proper shipping name

DOT, IMDG, IATA

*Void*

Transport hazard class(es)

DOT, ADN, IMDG, IATA

Class

*Void*

Packing group

DOT, IMDG, IATA

*Void*

Environmental hazards:

*Not applicable.*

Special precautions for user

*Not applicable.*

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

*Not applicable.*

UN "Model Regulation":

*Void*

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**15 Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture***No further relevant information available.***Sara****Section 355 (extremely hazardous substances):**

CAS: 7647-01-0 | hydrochloric acid

**Section 313 (Specific toxic chemical listings):**

CAS: 7647-01-0 | hydrochloric acid

**TSCA (Toxic Substances Control Act):***All components have the value ACTIVE.***Hazardous Air Pollutants**

CAS: 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.***Carcinogenicity categories****EPA (Environmental Protection Agency)***None of the ingredients is listed.***TLV (Threshold Limit Value)**

CAS: 7647-01-0 | hydrochloric acid

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**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

**Signal word** *Danger***Hazard-determining components of labeling:***hydrochloric acid***Hazard statements***Causes severe skin burns and eye damage.***Precautionary statements***If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**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).*

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*Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***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:** PCC - TWR**Contact:** *MSDS.pcc@endress.com***Date of preparation / last revision** 11/03/2023**Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organisation*

*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)*

*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*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Acute Toxicity - Oral 4: Acute toxicity – Category 4*

*Skin Corrosion 1B: Skin corrosion/irritation – Category 1B*

*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*

**\* Data compared to the previous version altered.**

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