Revision: 17.07.2023

according to Regulation (EC) No 1907/2006, Article 31

Endress + Hauser 🔣

Printing date 21.10.2024 Version 11 (replaces version 10)

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

1.1 Product identifier

Trade name: Cleaning solution Synonym: for CA80PH/CR Article number: CY800-AFx1 UFI: DEY0-C03M-M00K-0931

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

Product category PC21 Laboratory chemicals

Application of the substance / the mixture Cleaning agent/ Cleaner

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser
Conducta GmbH+Co. KG
Dieselstraße 24
D-70839 Gerlingen

Further information obtainable from:

Phone: +49 (0)7156 209-10117 E-Mail: MSDS.PCC@endress.com

1.4 Emergency telephone number: Phone: +49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms





GHS02 GHS05

Signal word Danger

Hazard-determining components of labelling:

hydrochloric acid

Hazard statements

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

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Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

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.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

2.3 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:			
CAS: 67-63-0 EINECS: 200-661-7 Registration number: 01- 2119457558-25-XXXX	propan-2-ol	10-20%	
CAS: 7647-01-0 EINECS: 231-595-7 Registration number: 01- 2119484862-27-XXXX	hydrochloric acid Skin Corr. 1B, H314; Eye Dam. 1, H318; ↑ Acute Tox. 4, H302; STOT SE 3, H335 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % STOT SE 3; H335: C ≥ 10 %	5-10%	

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

SECTION 4: First aid measures

4.1 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 plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

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

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

Protective equipment: Mount respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Storage class: 3

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 7647-01-0 hydrochloric acid

IOELV Short-term value: 15 mg/m³, 10 ppm

Long-term value: 8 mg/m³, 5 ppm

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		(Joing, or page 5)			
DNELs	DNELs				
CAS: 7647-01-0 hydrochloric acid					
Inhalative	DNEL short-term	15 mg/m³ (worker) (local effects)			
		15 mg/m³ (consumer) (local effects)			
	DNEL long-term	8 mg/m³ (worker) (local effects)			
		8 mg/m³ (consumer) (local effects)			

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as 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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labelling 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical stateFluidColour:ColourlessOdour:Alcohol-likeOdour threshold:Not determined.

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Trade name: Cleaning solution

Melting point/freezing point: Undetermined.

Boiling point or initial boiling point and boiling

range 82 °C

Flammability Highly flammable.

Lower and upper explosion limit

Lower: 2 Vol %Upper: 12 Vol %Flash point: $< 23 \text{ }^{\circ}\text{C}$ Auto-ignition temperature: $425 \text{ }^{\circ}\text{C}$

Decomposition temperature: Not determined.

pH at 20 °C <2

Viscosity:

Kinematic viscosity

Not determined.

Not determined.

Not determined.

Solubility

water: Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value) Not determined.

Vapour pressure at 20 °C: 43 hPa

Density and/or relative density

Density:Not determined.Relative densityNot determined.Vapour densityNot determined.

9.2 Other information

Appearance:

Form: Fluid

Important information on protection of health

and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

Solvent content:

 Organic solvents:
 15.0 %

 Water:
 71.4 %

 Solids content:
 0.0 %

Change in condition

Evaporation rateNot determined.

Information with regard to physical hazard

classes

Explosives Void
Flammable gases Void
Aerosols Void
Oxidising gases Void
Gases under pressure Void

Flammable liquids Highly flammable liquid and vapour.

Flammable solids

Self-reactive substances and mixtures

Void

Pyrophoric liquids

Pyrophoric solids

Void

Self-heating substances and mixtures

Void

Substances and mixtures, which emit flammable gases in contact with water

Void

Oxidising liquids

Void

gases in contact with water Void
Oxidising liquids Void
Oxidising solids Void
Organic peroxides Void
Corrosive to metals Void

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Trade name: Cleaning solution

Desensitised explosives Void

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SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

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

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

LD/LC50 values relevant for classification:			
CAS: 67-63-0 propan-2-ol			
Oral	LD50	5,045 mg/kg (rat)	
Dermal	LD50	12,800 mg/kg (rabbit)	
Inhalative	LC50/4 h	30 mg/l (rat)	
CAS: 7647-01-0 hydrochloric acid			
Oral	LD50	900 mg/kg (rabbit)	

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

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

Reproductive toxicity 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.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (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.

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Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

16 05 06* laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA

14.2 UN proper shipping name

ADR

IMDG

UN2924

UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S.

(ISOPROPANOL (ISOPROPYL ALCOHOL),

HYDROCHLORIC ACID)

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

(ISOPROPANOL (ISOPROPYL ALCOHOL),

HYDROCHLORIC ACID)

IATA Flammable liquid, corrosive, n.o.s. (containing

ISOPROPANOL (ISOPROPYL ALCOHOL),

HYDROCHLORIC ACID)

14.3 Transport hazard class(es)

ADR





Class 3 (FC) Flammable liquids.

Label 3+8

IMDG





Class 3 Flammable liquids. Label 3/8

IATA





Class Label

14.4 Packing group ADR, IMDG, IATA

3 Flammable liquids.

3 (8)

II

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14.5 Environmental hazards: Not applicable.

14.6 Special precautions for userWarning: Flammable liquids.

Hazard identification number (Kemler code): 338

EMS Number: F-E,S-C
Segregation groups (SGG18) Alkalis

Stowage Category B

Stowage Code SW2 Clear of living quarters.

Segregation Code SG35 Stow "separated from" SGG1-acids

14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

Transport/Additional information:

ADR

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

Transport category 2
Tunnel restriction code D/E

IMDG

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 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S.

UN "Model Regulation": UN 2924 FLAMMABLE LIQUID, CORROSIVI (ISOPROPANOL (ISOPROPYL ALCOHOL),

HYDROCHLORIC ACID), 3 (8), II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



P310



GHS02 GHS05

Signal word Danger

Hazard-determining components of labelling:

hydrochloric acid
Hazard statements

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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Trade name: Cleaning solution

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Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements $5,000\ t$ Qualifying quantity (tonnes) for the application of upper-tier requirements $50,000\ t$

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

CAS: 7647-01-0 hydrochloric acid

3

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

CAS: 7647-01-0 hydrochloric acid

3

National regulations:

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

16.3 Recommended restriction of use

Department issuing SDS: PCC-TWR
Contact: MSDS.pcc@endress.com
Date of previous version: 17.12.2020
Version number of previous version: 10

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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)

DNEL: Derived No-Effect Level (REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.