

## 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:** 00356 21 22 40 71

## 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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**Trade name: Cleaning solution**

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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.*

<b>Dangerous components:</b>		
CAS: 67-63-0 EINECS: 200-661-7 Registration number: 01-2119457558-25-XXXX	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	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: 67-63-0 propan-2-ol**WEL (Great Britain) Short-term value: 1250 mg/m<sup>3</sup>, 500 ppmLong-term value: 999 mg/m<sup>3</sup>, 400 ppm

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<b>CAS: 7647-01-0 hydrochloric acid</b>		
IOELV (EU)	Short-term value: 15 mg/m <sup>3</sup> , 10 ppm Long-term value: 8 mg/m <sup>3</sup> , 5 ppm	
WEL (Great Britain)	Short-term value: 8 mg/m <sup>3</sup> , 5 ppm Long-term value: 2 mg/m <sup>3</sup> , 1 ppm (gas and aerosol mists)	
<b>DNELs</b>		
<b>CAS: 7647-01-0 hydrochloric acid</b>		
Inhalative	DNEL short-term	15 mg/m <sup>3</sup> (worker) (local effects) 15 mg/m <sup>3</sup> (consumer) (local effects)
	DNEL long-term	8 mg/m <sup>3</sup> (worker) (local effects) 8 mg/m <sup>3</sup> (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 through 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

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**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

Physical state	Fluid
Colour:	Colourless
Odour:	Alcohol-like
Odour threshold:	Not determined.
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 °C
Auto-ignition temperature:	425 °C
Decomposition temperature:	Not determined.
pH at 20 °C	<2
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	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 density	Not determined.
Vapour density	Not 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 rate	Not 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	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void

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Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

**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)
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**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.

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**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.*

*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*	<i>laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals</i>
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**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**

UN2924

**14.2 UN proper shipping name**

**ADR**

*UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), HYDROCHLORIC ACID)*

**IMDG**

*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.

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Label 3/8

## IATA



**Class** 3 Flammable liquids.  
**Label** 3 (8)  
**14.4 Packing group**  
**ADR, IMDG, IATA** II  
**14.5 Environmental hazards:** Not applicable.  
**14.6 Special precautions for user** Warning: 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 "Model Regulation":** UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S.  
 (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



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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**Trade name: Cleaning solution**

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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.

**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:** 09.06.2021

**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

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# Safety data sheet

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

Printing date 21.10.2024

Version 11 (replaces version 10)

Revision: 21.10.2024

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**Trade name: Cleaning solution**

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*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.**

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