

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

1.1 Product identifier

Trade name: cleaner CY820 oxidizing

Synonym: *cleaning concentrate*

Article number: *CY820-1+UA*

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

No further relevant information available.

Application of the substance / the mixture

Laboratory chemicals

Disinfectant

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: 0044 717 635 91 91

*** SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



flame over circle

Ox. Liq. 2 H272 May intensify fire; oxidiser.



corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Acute Tox. 4 H302 Harmful if swallowed.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

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Hazard pictograms



GHS03 GHS05 GHS07 GHS09

Signal word *Danger*

Hazard-determining components of labelling:

hydrogen peroxide solution
peracetic acid
acetic acid

Hazard statements

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P221 Take any precaution to avoid mixing with combustibles.
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.

Additional information:

Product contains: Restricted explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5 (1) and (3).

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: 7722-84-1 EINECS: 231-765-0 Registration number: 01-2119485845-22	hydrogen peroxide solution ⚠ Ox. Liq. 1, H271; ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332 Specific concentration limits: Ox. Liq. 1; H271: C ≥ 70 % Ox. Liq. 2; H272: 50 % ≤ C < 70 % Skin Corr. 1A; H314: C ≥ 70 % Skin Corr. 1B; H314: 50 % ≤ C < 70 % Skin Irrit. 2; H315: 35 % ≤ C < 50 % Eye Dam. 1; H318: C ≥ 8 % Eye Irrit. 2; H319: 5 % ≤ C < 8 % STOT SE 3; C ≥ 35 %	20-40%

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CAS: 64-19-7 EINECS: 200-580-7 Registration number: 01-2119475328-30	<i>acetic acid</i> Flam. Liq. 3, H226; Skin Corr. 1A, H314; Acute Tox. 4, H312 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	5-10%
CAS: 79-21-0 EINECS: 201-186-8 Registration number: 01-2119531330-56	<i>peracetic acid</i> Flam. Liq. 3, H226; Org. Perox. D, H242; Skin Corr. 1A, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 Specific concentration limit: STOT SE 3; H335: C ≥ 1 %	2-6%

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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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

After skin contact:

Call a doctor immediately.

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:

Call for a doctor immediately.

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.

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: no further information

5.2 Special hazards arising from the substance or mixture Carbon monoxide (CO)

5.3 Advice for firefighters No further relevant information available.

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

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6.2 Environmental precautions:*Inform respective authorities in case of seepage into water course or sewage system.**Dilute with plenty of water.**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 item 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***Avoid splashes or spray in enclosed areas.**Keep away from heat and direct sunlight.***Information about fire - and explosion protection:***Fumes can combine with air to form an explosive mixture.**Emergency cooling must be available in case of nearby fire.***7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** *Store only in the original receptacle.***Information about storage in one common storage facility:***Store away from oxidising agents.**Store away from reducing agents.***Further information about storage conditions:***Store in a cool place.**Keep container tightly sealed.***Storage class:** 5.1 B**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: 7722-84-1 hydrogen peroxide solution**WEL Short-term value: 2.8 mg/m³, 2 ppmLong-term value: 1.4 mg/m³, 1 ppm**CAS: 64-19-7 acetic acid**WEL Short-term value: 50 mg/m³, 20 ppmLong-term value: 25 mg/m³, 10 ppm**Additional information:** *The lists valid during the making were used as basis.***8.2 Exposure controls****Appropriate engineering controls** *No further data; see item 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.*

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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

Butyl rubber, BR

Nitrile rubber, NBR

Chloroprene rubber, CR

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*

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Physical state***Fluid***Colour:***Colourless***Odour:***Acrid***Odour threshold:***Not determined.***Melting point/freezing point:***Undetermined.***Boiling point or initial boiling point and boiling range***Undetermined.***Flammability***Not applicable.***Lower and upper explosion limit****Lower:***Not determined.***Upper:***Not determined.***Flash point:***> 60 °C***Decomposition temperature:***Not determined.***pH at 20 °C***0.5-1.5***Viscosity:****Kinematic viscosity***Not determined.***Dynamic:***Not determined.***Solubility****water:***Fully miscible.***Partition coefficient n-octanol/water (log value)***Not determined.***Vapour pressure at 20 °C:***23 hPa*

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Density and/or relative density

Density at 20 °C:	1.12 g/cm ³
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.

Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.
 Not determined.

Solvent content:

Organic solvents:	9.0 %
Water:	58.0 %
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	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	May intensify fire; oxidiser.
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

Corrosive action on metals.

Reacts with alkali and metals.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity Harmful if swallowed.

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LD/LC50 values relevant for classification:		
CAS: 64-19-7 acetic acid		
Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rbt)
CAS: 79-21-0 peracetic acid		
Oral	LD50	1,740 mg/kg (rat)
Skin corrosion/irritation Causes severe skin burns and eye damage.		
Serious eye damage/irritation Causes serious eye damage.		
STOT-single exposure May cause respiratory irritation.		
11.2 Information on other hazards		
Endocrine disrupting properties		
None of the ingredients is listed.		

SECTION 12: Ecological information**12.1 Toxicity**

Aquatic toxicity:	
CAS: 7722-84-1 hydrogen peroxide solution	
EC50[72h]	1.38 mg/l (Algae)
CAS: 64-19-7 acetic acid	
EC50[48h]	36.9 mg/l (Daphnia Magna)
EC50[72h]	>1,000 mg/l (Algae)
CAS: 79-21-0 peracetic acid	
EC50[48h]	0.73 mg/l (Daphnia Magna)
EC50[72h]	0.7 mg/l (Algae)
EC50[96h]	0.8 mg/l (Fish)
NOEC (chron aqua tox)	0.00094 mg/l (danio rerio)

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**Remark:** Toxic for fish**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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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.

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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.

Uncleaned packaging:

Recommendation: *Disposal must be made according to official regulations.*

Recommended cleansing agents: *Water, if necessary together with cleansing agents.*

SECTION 14: Transport information

14.1 UN number or ID number

IMDG, IATA

UN3149

14.2 UN proper shipping name

ADR

UN3149 HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED, MARINE POLLUTANT
Hydrogen peroxide and peroxyacetic acid mixture stabilized

IMDG

IATA

14.3 Transport hazard class(es)

ADR



Class

5.1 (OC1) Oxidising substances.

Label

5.1+8

IMDG



Class

5.1 Oxidising substances.

Label

5.1/8

IATA



Class

5.1 Oxidising substances.

Label

5.1 (8)

14.4 Packing group

ADR, IMDG, IATA

II

14.5 Environmental hazards:

Product contains environmentally hazardous substances: peracetic acid

Marine pollutant:

Yes

Symbol (fish and tree)

Symbol (fish and tree)

Special marking (ADR):

Warning: Oxidising substances.

14.6 Special precautions for user

Hazard identification number (Kemler code):

58

EMS Number:

F-H,S-Q

Segregation groups

Peroxides

Stowage Category

D

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Stowage Code SW1 Protected from sources of heat.
Segregation Code SG16 Stow "separated from" class 4.1
 SG59 Stow "separated from" SGG14-permanganates
 SG72 See 7.2.6.3.2.

14.7 Maritime transport in bulk according to IMO instruments Not applicable.

Transport/Additional information:**ADR**

Limited quantities (LQ) 1L
Transport category 2
Tunnel restriction code 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 3149 HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED, 5.1 (8), II, ENVIRONMENTALLY HAZARDOUS

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 GB CLP regulation.

Hazard pictograms

GHS03 GHS05 GHS07 GHS09

Signal word *Danger*

Hazard-determining components of labelling:

hydrogen peroxide solution
 peracetic acid
 acetic acid

Hazard statements

H272 May intensify fire; oxidiser.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H335 May cause respiratory irritation.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P221 Take any precaution to avoid mixing with combustibles.
 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.

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Seveso category

P8 OXIDISING LIQUIDS AND SOLIDS

E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t**Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t****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.

16.1 Relevant phrases

H226 Flammable liquid and vapour.

H242 Heating may cause a fire.

H271 May cause fire or explosion; strong oxidiser.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

16.3 Recommended restriction of use**Department issuing SDS:** PCC-TWR**Contact:** MSDS.pcc@endress.com**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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Ox. Liq. 1: Oxidizing liquids – Category 1

Ox. Liq. 2: Oxidizing liquids – Category 2

Org. Perox. D: Organic peroxides – Type C/D

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

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

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

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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