

1 Identification

Product identifier

Trade name: **Cleaning solution acid**

Article number: CAY747-VxxAAE

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 GmbH+Co. KG
Dieselstraße 24
D-70839 Gerlingen

Further information obtainable from:

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

Emergency telephone number: +1 604 682 5050

* 2 Hazard identification

Classification of the substance or mixture



GHS05 Corrosion

Skin Corrosion - Category 1A
Serious Eye Damage - Category 1

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.



GHS07

Specific Target Organ Toxicity - Single Exposure -
Category 3

H335 May cause respiratory irritation.

Label elements

GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms



GHS05 GHS07

Signal word *Danger*

Hazard-determining components of labelling:

Lactic acid
citric acid
Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.

Hazard statements

Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statements

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.

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*Specific treatment (see on this label).**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Other hazards***The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.***3 Composition/Information on ingredients****Chemical characterisation: Mixtures****Description:** *Mixture of substances listed below with nonhazardous additions.***Dangerous components:**

CAS: 77-92-9	citric acid ⚠ Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	10-30% *
CAS: 50-21-5	Lactic acid ⚠ Skin Corrosion - Category 1B, H314; Serious Eye Damage - Category 1, H318; ⚠ Specific Target Organ Toxicity - Single Exposure - Category 3, H335	5-10% *
CAS: 85536-14-7	Benzenesulfonic acid, 4-C10-13-sec-alkylderivs. ⚠ Skin Corrosion - Category 1A, H314; Serious Eye Damage - Category 1, H318; ⚠ Acute Toxicity (Oral) - Category 4, H302	3-5% *

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 plenty of water and provide fresh air. Call for a doctor immediately.***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:***CO₂, 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.***Protective equipment:** *Mount respiratory protective device.*

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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.

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

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.

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.

7 Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: *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 container 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 facilities: *No further data; see item 7.*

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

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.

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.

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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-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**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 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:	<i>Fluid</i>
Colour:	<i>Colourless</i>
Odour:	<i>Characteristic</i>
Odour threshold:	<i>Not determined.</i>
pH-value at 20 °C:	<i><2</i>

Change in condition

Melting point/freezing point:	<i>0 °C</i>
Initial boiling point and boiling range:	<i>Undetermined.</i>

Flash point: *Not applicable.*

Flammability (solid, gas): *Not applicable.*

Ignition temperature: *1 °C*

Decomposition temperature: *Not determined.*

Auto-ignition temperature: *Product is not selfigniting.*

Explosive properties: *Product does not present an explosion hazard.
Not determined.*

Explosion limits:

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>

Vapour pressure at 20 °C: *23 hPa*

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Density at 20 °C:	1.07 g/cm ³
Relative density	Not determined.
Vapour 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:	>80.0 %
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 relevant for classification:****CAS: 77-92-9 citric acid**

Oral | LD50 | 5,040 mg/kg (Mouse)

CAS: 85536-14-7 Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.

Oral | LD50 | 1,350 mg/kg (rat)

Primary irritant effect:**Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.**Serious eye damage/irritation**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

Respiratory or skin sensitisation No sensitising effects known.**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information**Toxicity****Aquatic toxicity:** No further relevant information available.

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Persistence and degradability *No further relevant information available.*

Behaviour in environmental systems:

Bioaccumulative potential *No further relevant information available.*

Mobility in soil *No further relevant information available.*

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.

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 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.*

14 Transport information

UN-Number

UN3265

IMDG, IATA

UN proper shipping name

ADR

UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Lactic acid, Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.)

IMDG

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Lactic acid, Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.)

IATA

Corrosive liquid, acidic, organic, n.o.s. (Lactic acid/ Benzenesulfonic acid, 4-C10-13-sec-alkylderivs. solution)

Transport hazard class(es)

ADR



Class

8 (C3) Corrosive substances.

Label

8

IMDG, IATA



Class

8 Corrosive substances.

Label

8

Packing group

ADR, IMDG, IATA

II

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Environmental hazards:	<i>Not applicable.</i>
Special precautions for user	<i>Warning: Corrosive substances.</i>
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
Segregation groups	Acids
Stowage Category	B
Stowage Code	SW2 Clear of living quarters.
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
Transport in bulk according to Annex II of Marpol and the IBC Code	<i>Not applicable.</i>

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 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC,
 N.O.S. (LACTIC ACID, BENZENESULFONIC ACID, 4-
 C10-13-SEC-ALKYLDERIVS.), 8, II

UN "Model Regulation":***15 Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms

GHS05 GHS07

Signal word *Danger***Hazard-determining components of labelling:**

Lactic acid
citric acid
Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.

Hazard statements

Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statements

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.

National regulations:

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

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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 the latest revision of the safety data sheet** 03/31/2022 / 2**Abbreviations and acronyms:***IMDG: International Maritime Code for Dangerous Goods**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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**** Data compared to the previous version altered.**