

03/20/2022

Kit Components

Product code	Description
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CY80HA-R2+ST	CA80HA Reagent Set
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Components:

71385788	CA80HA Reagent RK, Component 1
71385789	CA80HA Reagent RK, Component 2

1 Identification

Product identifier

Trade name: **CA80HA Reagent RK, Component 1**

Article number: 71385788

Application of the substance / the mixture *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 1B H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1 H318 Causes serious eye damage.

Label elements

GHS label elements

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

Hazard pictograms



GHS05

Signal word *Danger*

Hazard-determining components of labelling:

2-Amino-2-methylpropane-1,3-diol

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 [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.

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.*

(Contd. on page 2)

Trade name: CA80HA Reagent RK, Component 1

(Contd. of page 1)

Dangerous components:		
CAS: 115-69-5	2-Amino-2-methylpropane-1,3-diol	7-13% *
	 Corrosive to Metals - Category 1, H290; Skin Corrosion - Category 1B, H314;  Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 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 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: Use fire extinguishing methods suitable to surrounding conditions.

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.

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: 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.

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Trade name: CA80HA Reagent RK, Component 1

(Contd. of page 2)

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.

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

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

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Trade name: CA80HA Reagent RK, Component 1

(Contd. of page 3)

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>Odourless</i>
Odour threshold:	<i>Not determined.</i>
pH-value at 20 °C:	<i>7.5-9.5</i>

Change in condition

Melting point/freezing point:	<i>Undetermined.</i>
Initial boiling point and boiling range:	<i>100 °C</i>

Flash point: *Not applicable.***Flammability (solid, gas):** *Not applicable.***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***Density:** *Not determined.***Relative density** *Not determined.***Vapour density** *Not determined.***Evaporation rate** *Not determined.***Solubility in / Miscibility with****water:** *Not miscible or difficult to mix.***Partition coefficient: n-octanol/water:** *Not determined.***Viscosity:****Dynamic:** *Not determined.***Kinematic:** *Not determined.***Solvent content:****Water:** *87.9 %***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.*

(Contd. on page 5)

Trade name: CA80HA Reagent RK, Component 1

(Contd. of page 4)

Hazardous decomposition products: *No dangerous decomposition products known.*

*11 Toxicological information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:**CAS: 115-69-5 2-Amino-2-methylpropane-1,3-diol**

Oral | LD50 | 140 mg/kg (Mouse)

Primary irritant effect:**Skin corrosion/irritation** *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.***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.***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.*

14 Transport information

UN-Number**IMDG, IATA**

UN1760

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—CDN—

Trade name: CA80HA Reagent RK, Component 1

(Contd. of page 5)

UN proper shipping name

ADR UN1760 CORROSIVE LIQUID, N.O.S. (2-Amino-2-methylpropane-1,3-diol)

IMDG CORROSIVE LIQUID, N.O.S. (2-Amino-2-methylpropane-1,3-diol)

IATA Corrosive liquid, n.o.s. (containing 2-Amino-2-methylpropane-1,3-diol)

Transport hazard class(es)

ADR



Class 8 (C9) Corrosive substances.

Label 8

IMDG, IATA



Class 8 Corrosive substances.

Label 8

Packing group

ADR, IMDG, IATA III

Environmental hazards: Not applicable.

Special precautions for user Warning: Corrosive substances.

Hazard identification number (Kemler code): 80

EMS Number: F-A,S-B

Segregation groups Alkalis

Stowage Category A

Stowage Code SW2 Clear of living quarters.

Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ) 5L

Transport category 3

Tunnel restriction code E

IMDG

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN 1760 CORROSIVE LIQUID, N.O.S. (2-AMINO-2-METHYLPROPANE-1,3-DIOL), 8, III

***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).

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Trade name: CA80HA Reagent RK, Component 1

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Hazard pictograms

GHS05

Signal word *Danger***Hazard-determining components of labelling:***2-Amino-2-methylpropane-1,3-diol***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 [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.***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** *03/20/2022 / 13***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.**

1 Identification

Product identifier

Trade name: **CA80HA Reagent RK, Component 2**

Article number: 71385789

Application of the substance / the mixture *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

The product is not classified, according to the Globally Harmonised System (GHS).

Label elements

GHS label elements *Void*

Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

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 non-hazardous substances*

Dangerous components: *Void*

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: *No special measures required.*

After inhalation: *Supply fresh air; consult doctor in case of complaints.*

After skin contact: *Generally the product does not irritate the skin.*

After eye contact: *Rinse opened eye for several minutes under running water.*

After swallowing: *If symptoms persist consult 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.

(Contd. on page 2)

—CDN—

Trade name: CA80HA Reagent RK, Component 2

(Contd. of page 1)

* 5 Fire-fighting measures

Extinguishing media**Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.***For safety reasons unsuitable extinguishing agents:** *no further information***Special hazards arising from the substance or mixture** *No further relevant information available.***Advice for firefighters** *No further relevant information available.***Protective equipment:** *No special measures required.*

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures *Wear protective clothing.***Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.***Methods and material for containment and cleaning up:** *Pick up mechanically.***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 *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***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:** *None.***Storage class:** *11***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:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Protection of hands:** *No chemical-protective gloves required.***Material of gloves***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.*

(Contd. on page 3)

Trade name: CA80HA Reagent RK, Component 2

(Contd. of page 2)

Eye protection: *Not required.*Body protection: *Protective work clothing**** 9 Physical and chemical properties**

Information on basic physical and chemical properties

General Information

Appearance:

Form:	<i>Solid</i>
Colour:	<i>White</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>Not determined.</i>
pH-value:	<i>Not applicable.</i>

Change in condition

Melting point/freezing point:	<i>Undetermined.</i>
Initial boiling point and boiling range:	<i>100 °C</i>

Flash point: *Not applicable.*Flammability (solid, gas): *Not determined.*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: *Not applicable.*Density: *Not determined.*Relative density: *Not determined.*Vapour density: *Not applicable.*Evaporation rate: *Not applicable.*

Solubility in / Miscibility with

water: *Insoluble.*Partition coefficient: n-octanol/water: *Not determined.*

Viscosity:

Dynamic: *Not applicable.*Kinematic: *Not applicable.*

Solvent content:

Solids content: *100.0 %*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.*

(Contd. on page 4)

Trade name: CA80HA Reagent RK, Component 2

(Contd. of page 3)

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity

Primary irritant effect:

Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritating effect.

Respiratory or skin sensitisation No sensitising effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

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.

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 Smaller quantities can be disposed of with household waste.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

*14 Transport information

UN-Number

ADN, IMDG, IATA Void

UN proper shipping name

ADR, ADN, IMDG, IATA Void

Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class Void

Packing group

ADR, IMDG, IATA Void

Environmental hazards:

Marine pollutant: No

Special precautions for user Not applicable.

(Contd. on page 5)

Trade name: CA80HA Reagent RK, Component 2

(Contd. of page 4)

Transport in bulk according to Annex II of Marpol and the IBC Code*Not applicable.***Transport/Additional information:***Not dangerous according to the above specifications.***UN "Model Regulation":***Void***15 Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****GHS label elements** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***National regulations:****Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***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** *03/20/2022 / 3***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)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**** Data compared to the previous version altered.**