

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

### 1.1 Product identifier

Trade name: **Standard solution Cr(VI)**

Synonym: 4,0 mg/l

Article number: CY80CR-AF+TO

### 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*

### 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

The product is not classified, according to the GB CLP regulation.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 *Void*

Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

### 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: *aqueous solution*

Dangerous components: *Void*

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: *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.*

---

**Trade name: Standard solution Cr(VI)**

---

(Contd. of page 1)

**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:***CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***For safety reasons unsuitable extinguishing agents:** *no further information***5.2 Special hazards arising from the substance or mixture** *No further relevant information available.***5.3 Advice for firefighters** *No further relevant information available.***Protective equipment:** *No special measures required.*

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***6.2 Environmental precautions:** *Dilute with plenty of water.***6.3 Methods and material for containment and cleaning up:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).***6.4 Reference to other sections***No dangerous substances are released.**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** *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***7.2 Conditions for safe storage, including any incompatibilities****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:** *12***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:***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.***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:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Hand protection** *No chemical-protective gloves required.*

---

(Contd. on page 3)

Trade name: Standard solution Cr(VI)

(Contd. of page 2)

**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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eyeface protection** Not required.

**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:                                                   | Characteristic      |
| Odour threshold:                                         | Not determined.     |
| Melting point/freezing point:                            | Undetermined.       |
| Boiling point or initial boiling point and boiling range | 100 °C              |
| Flammability                                             | Not applicable.     |
| Lower and upper explosion limit                          |                     |
| Lower:                                                   | Not determined.     |
| Upper:                                                   | Not determined.     |
| Flash point:                                             | Not applicable.     |
| Decomposition temperature:                               | Not determined.     |
| pH at 20 °C                                              | 4                   |
| 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              |
| Density and/or relative density                          |                     |
| Density at 20 °C:                                        | 1 g/cm <sup>3</sup> |
| 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 does not present an explosion hazard.<br>Not determined. |
| Solvent content:                                                              |                                                                  |
| Water:                                                                        | >99.0 %                                                          |
| Solids content:                                                               | 0.0 %                                                            |
| Change in condition                                                           |                                                                  |
| Evaporation rate                                                              | Not determined.                                                  |

(Contd. on page 4)

Trade name: Standard solution Cr(VI)

(Contd. of page 3)

## 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                                                         | 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.*Skin corrosion/irritation *Based on available data, the classification criteria are not met.*Serious eye damage/irritation *Based on available data, the classification criteria are not met.*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.*

(Contd. on page 5)

GB

**Trade name: Standard solution Cr(VI)**

(Contd. of page 4)

**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:** *Not hazardous for water.***SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** *Smaller quantities can be disposed of with household waste.***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****ADN, IMDG, IATA** *Void***14.2 UN proper shipping name****ADR, ADN, IMDG, IATA** *Void***14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class** *Void***14.4 Packing group****ADR, IMDG, IATA** *Void***14.5 Environmental hazards:****Marine pollutant:** *No***14.6 Special precautions for user** *Not applicable.***14.7 Maritime transport in bulk according to IMO instruments** *Not applicable.***Transport/Additional information:** *Not dangerous according to the above specifications.***UN "Model Regulation":** *Void***\* SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**Poisons Act****Regulated explosives precursors***None of the ingredients is listed.***Regulated poisons***None of the ingredients is listed.***Reportable explosives precursors***None of the ingredients is listed.***Reportable poisons***None of the ingredients is listed.***Labelling according to Regulation (EC) No 1272/2008** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void*

(Contd. on page 6)

---

Trade name: Standard solution Cr(VI)

---

(Contd. of page 5)

Directive 2012/18/EU

Named dangerous substances - ANNEX I *None of the ingredients is listed.***LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (UK ANNEX XIV)**

CAS: 7789-00-6 | potassium chromate

Sunset date: 2017-09-21

**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](mailto: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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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