

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

**1.1 Product identifier**

**Trade name:** C-41 CD-SLR Part 3

**Article number:** 103132

**Index number:**

None of the ingredients is listed.

**UFI:** UHR1-K03P-G007-VC4Y

**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** Developer for photographic use

**1.3 Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**

TETENAL 1847 GmbH

Schützenwall 31-35

D-22844 Norderstedt /Germany

Tel.: +49 (0) 40 521 45-0; Fax: +49 (0)40-52145-296

www.tetenal.com; E-mail: info@tetenal.com

**Further information obtainable from:** Department product safety. E-Mail: sida@tetenal.com

**1.4 Emergency telephone number:**

Poison Information Centre Germany: +49 (0) 30 - 30686 700 (English and German 24 hours)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Met. Corr. 1 H290 May be corrosive to metals.

Skin Corr. 1A 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**



GHS05

**Signal word** Danger

**Hazard-determining components of labelling:**

Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)

potassium hydroxide

**Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P234 Keep only in original packaging.

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P280 Wear eye protection / face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

### Trade name: C-41 CD-SLR Part 3

(Contd. of page 1)

- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in a corrosion resistant container / container with a resistant inner liner.
- P501 Dispose of contents/container in accordance with local regulations.

#### . 2.3 Other hazards

#### . Results of PBT and vPvB assessment

. PBT: Not applicable.

. vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

### . 3.2 Chemical characterisation: Mixtures

. **Description:** Mixture of substances listed below and with nonhazardous additions.

#### . **Dangerous components:**

CAS: 584-08-7	potassium carbonate	25-50%
EINECS: 209-529-3	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119532646-36		
CAS: 140-01-2	Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)	1-5%
EINECS: 205-391-3	⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H332	
Index number: 607-736-00-7		
Reg.nr.: 01-2119474445-33		
CAS: 1310-58-3	potassium hydroxide	0.5-2%
EINECS: 215-181-3	⚠ Met. Corr.1, H290; Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302	
Index number: 019-002-00-8		
Reg.nr.: 01-2119487136-33		

. **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/shoes 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.. **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

#### . **After swallowing:**

Do not induce vomiting; call for medical help 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:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

### . 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO<sub>x</sub>)

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

**Trade name: C-41 CD-SLR Part 3**

(Contd. of page 2)

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

**5.3 Advice for firefighters**
**Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**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.

Pick up mechanically.

**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.

**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:** Store only in the original receptacle.

**Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with acids.

Store away from oxidising agents.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store under lock and key and out of the reach of children.

Recommended storage temperature: 5-30°C

Protect from exposure to the light.

**7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

**8.1 Control parameters**
**Ingredients with limit values that require monitoring at the workplace:**
**1310-58-3 potassium hydroxide (1-5%)**
WEL (Great Britain) Short-term value: 2 mg/m<sup>3</sup>REL (USA) Ceiling limit: 2 mg/m<sup>3</sup>TLV (USA) Ceiling limit: 2 mg/m<sup>3</sup>

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

**Trade name: C-41 CD-SLR Part 3**

(Contd. of page 3)

### . DNELs

#### 1310-58-3 potassium hydroxide

 Inhalative Long-term - local - effects 1 mg/m<sup>3</sup> (Worker (Arbeiter))

 Long-term - systemic effects 1 mg/m<sup>3</sup> (general population)

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

### . 8.2 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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

 . **Respiratory protection:** required at the appearance from fumes/vapours/aerosol. Filter ABEK

#### . Protection of hands:



Protective gloves

Impervious gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### . 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.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

#### . Penetration time of glove material

Glove material	breakthrough-time	layer thickness
Butyl rubber:	≥480 min	≥0,4mm
Nitrile rubber:	≥480 min	≥0,38mm
Neoprene:	≥240 min	≥0,65mm

The exact break trough 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

## SECTION 9: Physical and chemical properties

### . 9.1 Information on basic physical and chemical properties

#### . General Information

#### . Appearance:

<b>Form:</b>	Fluid
<b>Colour:</b>	Light yellow
<b>Odour:</b>	Recognisable

 . **pH-value at 20 °C:** >14

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

Trade name: **C-41 CD-SLR Part 3**

(Contd. of page 4)

<b>. Change in condition</b>	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
<b>. Flash point:</b>	
	Not applicable.
<b>. Auto-ignition temperature:</b>	
	Product is not selfigniting.
<b>. Explosive properties:</b>	
	Product does not present an explosion hazard.
<b>. Vapour pressure:</b>	
	Not determined.
<b>. Density at 20 °C:</b>	
	~1.5 g/cm <sup>3</sup>
<b>. Solubility in / Miscibility with water:</b>	
	Fully miscible.
<b>. Solvent content:</b>	
Water:	50-90 %
VOC (EC)	0.00 %
<b>. Solids content:</b>	
	0.0 %
<b>. 9.2 Other information</b>	
	No further relevant information available.

### 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** Reacts with acids, alkalis and oxidising agents.
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:** Corrosive gases/vapours

### SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity** Based on available data, the classification criteria are not met.
- . **LD/LC50 values relevant for classification:**
- 584-08-7 potassium carbonate**  
Oral LD50 >2000 mg/kg (rat)
- 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)**  
Oral LD50 >2000 mg/kg (rat)
- 1310-58-3 potassium hydroxide**  
Oral LD50 333 mg/kg (rat)
- . **Primary irritant effect:**
- . **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.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **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.

(Contd. on page 6)

EN

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

**Trade name: C-41 CD-SLR Part 3**

. **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. of page 5)

### SECTION 12: Ecological information

#### . 12.1 Toxicity

##### . Aquatic toxicity:

#### 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)

EC50 48h: >500 mg/l (daphnia magna (Water flea))

48h: >500 mg/l (Invertebrates)

LC50 96h: 1115 mg/l (fish)

96h: >1000 mg/l (Lepomis macrochirus (Sonnenbarsch))

#### 1310-58-3 potassium hydroxide

LC50 96h: 80 mg/l (fish: Gambusia affinis)

24h: 165 mg/l (fish: Poecilia reticulata)

. **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.

#### . Ecotoxicological effects:

. **Remark:** Harmful to fish

#### . Additional ecological information:

##### . General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Harmful to aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

#### . 12.5 Results of PBT and vPvB assessment

. **PBT:** Not applicable.

. **vPvB:** Not applicable.

. **12.6 Other adverse effects** No further relevant information available.

### 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

09 01 01\* water-based developer and activator solutions

##### . Uncleaned packaging:

##### . Recommendation:

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

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

### SECTION 14: Transport information

#### . 14.1 UN-Number

. **ADR, IMDG, IATA**

UN1814

#### . 14.2 UN proper shipping name

. **ADR**

1814 POTASSIUM HYDROXIDE SOLUTION mixture

(Contd. on page 7)

EN

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

**Trade name: C-41 CD-SLR Part 3**

(Contd. of page 6)

. IMDG, IATA	POTASSIUM HYDROXIDE SOLUTION mixture
. 14.3 Transport hazard class(es)	
. ADR	
. Class	8 (C5) Corrosive substances.
. Label	8
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. IMDG, IATA	
. Class	8 Corrosive substances.
. Label	8
. 14.4 Packing group	
. ADR, IMDG, IATA	III
. 14.5 Environmental hazards:	
. Marine pollutant:	No
. 14.6 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
. Segregation Code	SG35 Stow "separated from" SGG1-acids
. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
. Transport/Additional information:	
-----	
. ADR	
. 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
. 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 1814 POTASSIUM HYDROXIDE SOLUTION MIXTURE, 8, III

### SECTION 15: Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- . 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.

- . Relevant phrases  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

(Contd. on page 8)

EN

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.10.2020

version no: 8

Revision: 13.10.2020

**Trade name: C-41 CD-SLR Part 3**

(Contd. of page 7)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

. **Contact:** E: sida@tetenal.com. **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport 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)

VOC: Volatile Organic Compounds (USA, EU)

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

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity - inhalation – Category 4

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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

-EN-