

Safety data sheet
according to 1907/2006/EC, Article 31

TETENAL

Printing date 23.07.2021

version no: 4

Revision: 23.07.2021

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

1.1 Product identifier

Trade name: E-6 CD-R Part 1
Color Developer and Replenisher

Article number: 105482

UFI: 1253-601X-S004-8EKP

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. 1B 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:

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 protective gloves/protective clothing/eye protection/face protection/hearing 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].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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- 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.
- 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: 7778-53-2	Tripotassium orthophosphate	10-<25%
EINECS: 231-907-1	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 1310-58-3	potassium hydroxide	1-5%
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.
Supply fresh air and to be sure call for a doctor.
- . **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:** 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:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

- . **Protective equipment:** No special measures required.

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SECTION 6: Accidental release measures

. 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation

. 6.2 Environmental precautions:

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

Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.

. 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 oxidising and acidic materials.

. 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

. 8.1 Control parameters

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

. 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/m³

REL (USA) Ceiling limit: 2 mg/m³

TLV (USA) Ceiling limit: 2 mg/m³

. DNELs

1310-58-3 potassium hydroxide

Inhalative Long-term - local - effects 1 mg/m³ (Worker (Arbeiter))

Long-term - systemic effects 1 mg/m³ (general population)

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. **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:** Ensure adequate ventilation

. **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:**

Safety glasses



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:**

Form: Fluid

Colour: Light yellow

. **Odour:** Odourless

. **pH-value at 20 °C:** >13

. **Change in condition**

Melting point/freezing point: Undetermined.

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Initial boiling point and boiling range:	Undetermined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Vapour pressure:	Not determined.
Density at 20 °C:	1.17 g/cm ³
Solubility in / Miscibility with water:	Fully miscible.
Solvent content:	
Organic solvents:	0.0 %
Water:	50-90 %
VOC (EC)	0.00 %
9.2 Other information	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:** Irritant 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:**
- 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.
- . **Additional toxicological information:**
- . **CMR effects (carcinogenity, 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.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:**
- 1310-58-3 potassium hydroxide**
- LC50 96 mg/l (fish: Gambusia affinis)
- 24 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.
- . **Additional ecological information:**
- . **General notes:**
- Must not reach sewage water or drainage ditch undiluted or unneutralised.
- 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 00 00 WASTES FROM THE PHOTOGRAPHIC INDUSTRY
- 09 01 00 wastes from the photographic industry
- 09 01 01* water-based developer and activator solutions
- . **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 | |
| . ADR, IMDG, IATA | UN1814 |
| . 14.2 UN proper shipping name | |
| . ADR | 1814 POTASSIUM HYDROXIDE SOLUTION |
| . IMDG, IATA | POTASSIUM HYDROXIDE SOLUTION |
| . 14.3 Transport hazard class(es) | |
| . ADR | |
| . Class | 8 (C5) Corrosive substances. |
| . Label | 8 |
| ----- | |
| . IMDG, IATA | |
| . Class | 8 Corrosive substances. |
| . Label | 8 |
| . 14.4 Packing group | |
| . ADR, IMDG, IATA | III |

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. 14.5 Environmental hazards:	
. Marine pollutant:	No
. 14.6 Special precautions for user	Warning: Corrosive substances.
. 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	2
. 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, 8, III

. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 No further relevant information available.

. Directive 2012/18/EU
. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

. National regulations:
. Regulation (EC) No 648/2004 on detergents / Labelling for contents

phosphates	≥5 - <15%
phosphonates	<5%

. 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.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

. 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)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation

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ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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)

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 – Category 4

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

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

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

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

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