

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

TETENAL

Printing date 21.07.2022

version no: 11 (replaces version 10)

Revision: 21.07.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name: C-41 CD-R SP 45
Colour Developer Replenisher

Article number: 102570

Index number:

None of the ingredients is listed.

UFI: A0X3-D0MQ-7006-TP5P

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**

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms Void

Signal word Void

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local regulations.

Additional information:

EUH208 Contains (4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4), bis(hydroxylammonium) sulfate. May produce an allergic reaction.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

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

Dangerous components:

CAS: 584-08-7	potassium carbonate	1-5%
EINECS: 209-529-3	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119532646-36		

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CAS: 25646-77-9	(4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)	<1%
EINECS: 247-162-0	☠ Acute Tox. 3, H301; ☠ STOT RE 2, H373; ☠ Aquatic Acute 1,	
Index number: 612-133-00-7	H400; Aquatic Chronic 1, H410; ☠ Skin Sens. 1, H317	
CAS: 140-01-2	Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)	<1%
EINECS: 205-391-3	☠ STOT RE 2, H373; ☠ Acute Tox. 4, H332	
Index number: 607-736-00-7		
Reg.nr.: 01-2119474445-33		
CAS: 10039-54-0	bis(hydroxylammonium) sulfate	<1%
EINECS: 233-118-8	☠ Carc. 2, H351; STOT RE 2, H373; ☠ Met. Corr.1, H290; ☠ Aquatic	
Index number: 612-123-00-2	Acute 1, H400; ☠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2,	
Reg.nr.: 01-2119485971-25	H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
	Specific concentration limit: Met. Corr.1; H290: C ≥ 10 %	

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**
- After inhalation:** Supply fresh air; consult doctor in case of complaints.
- After skin contact:** Immediately rinse with water.
- After eye contact:** Rinse opened eye for several (15 min) under running water.
- After swallowing:** Rinse out mouth and then drink plenty of water.
- 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**
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
- 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**
Ensure adequate ventilation
Wear protective clothing.
- 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).
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.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- . **Information about fire - and explosion protection:** Protect from heat.
- . **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.
- . **Further information about storage conditions:**
- 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**
- . **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 item 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.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.
- . **Respiratory protection:** Ensure adequate ventilation
- . **Hand protection**
- 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**
- The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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

- . **Eye/face protection** Goggles recommended during refilling

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. **Body protection:** Protective work clothing

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SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Colour:	Light yellow
. Odour:	Odourless
. Melting point/freezing point:	Undetermined.
. Boiling point or initial boiling point and boiling range	>100 °C
. Flash point:	Not applicable.
. pH at 20 °C	~10
. Solubility	
. water:	Fully miscible.
. Vapour pressure:	Not determined.
. Density and/or relative density	
. Density at 20 °C:	1.04 g/cm ³

. 9.2 Other information

. Appearance:	
. Form:	Fluid
. Important information on protection of health and environment, and on safety.	
. Auto-ignition temperature:	Product is not selfigniting.
. Explosive properties:	Product does not present an explosion hazard.
. Solvent content:	
. Water:	90-98 %
. Solids content:	0.0 %

. 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:** Stable at environment temperature.

. **10.3 Possibility of hazardous reactions** No dangerous reactions known.

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- . **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 hazard classes as defined in Regulation (EC) No 1272/2008**
 - . **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 >2,000 mg/kg (rat)
- 25646-77-9 (4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)**
 Oral LD50 45 mg/kg (rat)
 Dermal LD50 >2,000 mg/kg (rat)
- 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)**
 Oral LD50 >2,000 mg/kg (rat)
- 10039-54-0 bis(hydroxylammonium) sulfate**
 Oral LD50 642-842 mg/kg (rat)
 Dermal LD50 1,500-2,000 mg/kg (rabbit)
- . **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:**
-
- 25646-77-9 (4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)**
 LC50 96 mg/l (daphnia magna (Water flea))
 1-96 mg/l (fish: Pimephales promelas)
- 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)**
 EC50 48 mg/l (daphnia magna (Water flea))
 48 mg/l (Invertebrates)
 LC50 96 mg/l (fish)
 96 mg/l (Lepomis macrochirus (Sonnenbarsch))
- 10039-54-0 bis(hydroxylammonium) sulfate**
 EC50 48 mg/l (daphnia magna (Water flea))
 LC50 96 mg/l (fathead minnow (Pimephales promelas))
- . **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.

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- . **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**
- . **Remark:** Harmful to fish
- . **Additional ecological information:**
- . **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Danger to drinking water if even small quantities leak into the ground.

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 or ID number | |
| . ADR, 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. |
| . UN "Model Regulation": | Void |

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- . **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 65

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DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008

Hazardous to the aquatic environment - long-term
(chronic) aquatic hazard

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Contact: E: sida@tetenal.com

Date of previous version: 12.02.2021

Version number of previous version: 10

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

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative
Met. Corr. 1: Corrosive to metals – Category 1
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources

Sources of key data used to compile the safety data sheet:

This Safety Data Sheet was prepared according to Annex II of the Regulation (EC) No. 1907/2006 (UK REACH). References to other legal acts and standards are indicated directly in the corresponding sections.

The data on physical and chemical properties of the product was generated in the laboratory of TETENAL 1847 GmbH.

The source for the toxicological data is the Registry of Toxic Effects of Chemical Substances (RTECS®).

The eco-toxicological data was received from our suppliers of raw substances.

Other sources: catalogue of phrases from the SDS-Software provider.

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

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