

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

**TETENAL**

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

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

**1.1 Product identifier**

**Trade name:** COLORTEC© RA-4 Professional Print Kit RT  
Colour Developer CD Part 1

**Article number:** 102124 CD Part 1

**Index number:**

None of the ingredients is listed.

**UFI:** TN10-S0X4-T00D-D267

**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**

Acute Tox. 4      H302 Harmful if swallowed.

Eye Dam. 1      H318 Causes serious eye damage.

Skin Sens. 1      H317 May cause an allergic skin reaction.

STOT RE 2      H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Aquatic Chronic 2 H411 Toxic 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 CLP regulation.

**Hazard pictograms**



GHS05

GHS07

GHS08

GHS09

**Signal word** Danger

**Hazard-determining components of labelling:**

diethylene glycol

N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)

ethylene glycol

**Hazard statements**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

H411 Toxic to aquatic life with long lasting effects.

(Contd. on page 2)

EN

# Safety data sheet

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

Printing date 08.03.2021

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Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT**  
**Colour Developer CD Part 1**

(Contd. of page 1)

**Precautionary statements**

- P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P103 Read carefully and follow all instructions.  
 P280 Wear protective gloves / eye protection.  
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
 P330 Rinse mouth.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 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.  
 P314 Get medical advice/attention if you feel unwell.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P391 Collect spillage.  
 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: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6	diethylene glycol ⚠ Acute Tox. 4, H302	10-<25%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28	ethylene glycol ⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H302	10-<25%
CAS: 25646-71-3 EINECS: 247-161-5 Index number: 612-134-00-2 Reg.nr.: 01-2120794432-50-0001	N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3) ⚠ Acute Tox. 3, H301; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Chronic 1, H410; ⚠ Skin Sens. 1, H317	5-10%

**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****General information:**

Immediately remove any clothing/shoes soiled by the product.  
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

Supply fresh air and to be sure call for a doctor.  
 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:**

Drink plenty of water and provide fresh air. Call for a doctor immediately.  
 Rinse mouth.

(Contd. on page 3)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 2)

- . **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:** Use fire extinguishing methods suitable to surrounding conditions.
- . **5.2 Special hazards arising from the substance or mixture**  
Nitrogen oxides (NOx)  
Carbon monoxide (CO)  
Sulphur dioxide (SO2)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . **5.3 Advice for firefighters**
- . **Protective equipment:**  
Mouth respiratory protective device.  
Do not inhale explosion gases or combustion gases.

### 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:**  
Do not allow product to reach sewage system or any water course.  
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).  
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**  
Keep away from heat and direct sunlight.  
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.  
Store away from oxidising agents.
- . **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.  
Protect from exposure to the light.

(Contd. on page 4)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 3)

Store under lock and key and out of the reach of children.  
Recommended storage temperature: 5-30°C  
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:

##### 111-46-6 diethylene glycol (25-50%)

WEL (Great Britain) Long-term value: 101 mg/m<sup>3</sup>, 23 ppm

WEEL (USA) Long-term value: 10 mg/m<sup>3</sup>

##### 107-21-1 ethylene glycol (10-<25%)

WEL (Great Britain) Short-term value: 104\*\* mg/m<sup>3</sup>, 40\*\* ppm

Long-term value: 10\* 52\*\* mg/m<sup>3</sup>, 20\*\* ppm

Sk \*particulate \*\*vapour

IOELV (EU) Short-term value: 104 mg/m<sup>3</sup>, 40 ppm

Long-term value: 52 mg/m<sup>3</sup>, 20 ppm

Skin

TLV (USA) Short-term value: C 100 mg/m<sup>3</sup>

H

#### DNELs

##### 111-46-6 diethylene glycol

Dermal Long-term - systemic - effects 43 mg/kg bw/day (Worker (Arbeiter))

Long-term - systemic effects (dynamic) 21 mg/kg bw/day (general population- Verbraucher)

Inhalative Long-term - local - effects 60 mg/m<sup>3</sup> (Worker (Arbeiter))

Long-term - systemic effects 12 mg/m<sup>3</sup> (Consumer (Verbraucher))

Long-term- systemics effects 44 mg/m<sup>3</sup> (Worker (Arbeiter))

#### PNECs

##### 111-46-6 diethylene glycol

Aquatic compartment - freshwater 10 mg/l (-)

Aquatic compartment - marine water 1 mg/l (-)

Aquatic compartment -water,intermittent releases 10 mg/l (-)

Aquatic compartment -sediment in freshwater 20.9 mg/kg sed dw (-)

Terrestrial compartment -soil 1.53 mg/kg dw (-)

Sewage treatment plant (Abwasserreinigungsanlagen) 199.5 mg/l (-)

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

#### 8.2 Exposure controls

##### Personal protective equipment:

##### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

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

Ensure adequate ventilation

(Contd. on page 5)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT**  
**Colour Developer CD Part 1**

(Contd. of page 4)

**. 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 red
<b>Odour:</b>	Sulfurous

**. Odour threshold:** Not determined.

**. pH-value at 20 °C:** ~2

**. Change in condition**

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

**. 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.

**. Explosion limits:**

<b>Lower:</b>	Not determined.
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(Contd. on page 6)

# Safety data sheet

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

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version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 5)

<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	~1.1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Fully miscible.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>Organic solvents:</b>	24.7 %
<b>Water:</b>	25-50 %
<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:** Stable at environment temperature.
- . **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:** Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . **10.6 Hazardous decomposition products:**  
Irritant gases/vapours  
Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity**  
Harmful if swallowed.
- . **LD/LC50 values relevant for classification:**
- 111-46-6 diethylene glycol**  
Oral LD50 12,565 mg/kg (rat)
- 107-21-1 ethylene glycol**  
Oral LD50 5,840 mg/kg (rat)  
9,530 mg/kg (rabbit)
- 25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)**  
Oral LD50 >75 mg/kg (rat)  
Dermal LD50 >2,000 mg/kg (rat)
- . **Primary irritant effect:**
- . **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- . **Serious eye damage/irritation**  
Causes serious eye damage.

(Contd. on page 7)

EN

# Safety data sheet

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Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 6)

- . **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- . **Additional toxicological information:**
- . **Acute effects (acute toxicity, irritation and corrosivity)**  
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:  
Harmful  
Irritant
- . **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**  
May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:**
- 111-46-6 diethylene glycol**  
EC50 24 mg/l (daphnia magna (Water flea))  
LC50 96 mg/l (Invertebrates)
- 107-21-1 ethylene glycol**  
EC50 48 mg/l (daphnia magna (Water flea))  
LC50 96 mg/l (fish: Oncorhynchus mykiss)  
96 mg/l (fish: Pimephales promelas)
- 25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)**  
LC50 96 mg/l (fish: 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.
- . **Ecotoxicological effects:**
- . **Remark:** Toxic for fish
- . **Additional ecological information:**
- . **General notes:**  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even extremely small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- . **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.

(Contd. on page 8)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 7)

**. European waste catalogue**

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** UN3082

**. 14.2 UN proper shipping name**

**. ADR** UN3082  
3082 ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine  
derivate CD-3)

**. IMDG, IATA** UN3082

**. 14.3 Transport hazard class(es)**

**. ADR**

**. Class** Void  
Not classified, ADR 3.3 Exception 375

**. ADN/R Class:** Void

**. IMDG**

**. Class** Void  
Not classified, IMDG 2.10.2.7

**. Label** 9

**. IATA**

**. Class** Void  
Not classified IATA 4.4 /A197

**. Label** 9

**. 14.4 Packing group**

**. ADR, IMDG, IATA** III

**. 14.5 Environmental hazards:**

**. Marine pollutant:** Yes

**. 14.6 Special precautions for user**

Not applicable.

**. Hazard identification number (Kemler code):** 90

**. EMS Number:** F-A,S-F

**. Stowage Category** A

**. 14.7 Transport in bulk according to Annex II of  
Marpol and the IBC Code**

Not applicable.

**. Transport/Additional information:**

Due to special provision 375 ADR and chapter 2.10.2.  
IMDG this item does not need to be labeled as dangerous  
goods.

**. 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

(Contd. on page 9)



# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 Professional Print Kit RT  
Colour Developer CD Part 1**

(Contd. of page 8)

<ul style="list-style-type: none"> <li>. <b>IMDG</b></li> <li>. <b>Limited quantities (LQ)</b></li> <li>. <b>Excepted quantities (EQ)</b></li> </ul>	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> <li>. <b>UN "Model Regulation":</b></li> </ul>	<p>UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine derivate CD-3), 9, III</p>

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **Labelling according to Regulation (EC) No 1272/2008 GHS label elements**
- . **Directive 2012/18/EU**
- . **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- . **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- . **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**

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

. **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
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- 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)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Acute toxicity - oral - Category 3
- Acute Tox. 4: Acute toxicity - oral - Category 4
- Eye Dam. 1: Serious eye damage/eye irritation - Category 1
- Skin Sens. 1: Skin sensitisation - Category 1
- STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

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

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

**TETENAL**

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

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

**1.1 Product identifier**

**Trade name:** COLORTEC© RA-4 PROFESSIONAL PRINT KIT RT  
Colour Developer CD Part 2

**Article number:** 102124 CD Part 2

**Index number:**

None of the ingredients is listed.

**UFI:** KQ31-N0NY-Q00W-2GJ2

**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**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

**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**



GHS07

**Signal word** Warning

**Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 1)

- . **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	10-<25%
EINECS: 209-529-3	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119532646-36		
CAS: 133986-51-3	2,2'-(Hydroxyimino)bisethanesulphonicacid, disodium salt (DSEHA)	5-10%
ELINCS: 407-370-6	⚠ Eye Irrit. 2, H319	
Reg.nr.: 01-0000015682-69		
CAS: 111-42-2	diethanolamine	1-5%
EINECS: 203-868-0	⚠ STOT RE 2, H373; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302;	
Index number: 603-071-00-1	⚠ Skin Irrit. 2, H315	
Reg.nr.: 01-2119488930-28		
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		

. **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. If symptoms persist, consult a doctor.
- . **After swallowing:** Do not induce vomiting; call for medical help 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:** Use fire extinguishing methods suitable to surrounding conditions.

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

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Sulphur dioxide (SO<sub>2</sub>)

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

#### . **5.3 Advice for firefighters**

. **Protective equipment:** Do not inhale explosion gases or combustion gases.

EN

(Contd. on page 3)

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 2)

### 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).  
 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.

**. 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.  
 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.  
 Protect from exposure to the light.  
 Store under lock and key and out of the reach of children.  
 Recommended storage temperature: 5-30°C

**. 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:**

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**

**. Personal protective equipment:**

**. General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.  
 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

(Contd. on page 4)

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 3)

**. 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	breakthroug-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>	Dark orange colour
<b>. Odour:</b>	Odourless
<b>. Odour threshold:</b>	Not determined.

**. pH-value at 20 °C:** ~11

**. Change in condition**

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

**. 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.

**. Explosion limits:**

<b>Lower:</b>	Not determined.
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(Contd. on page 5)

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 4)

<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	~1.3 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Fully miscible.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>Organic solvents:</b>	1.6 %
<b>Water:</b>	50-90 %
<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:** Stable at environment temperature.
- . **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:** Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . **10.6 Hazardous decomposition products:**  
 Irritant gases/vapours  
 Carbon monoxide and carbon dioxide

### 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 >2,000 mg/kg (rat)
- 133986-51-3 2,2'-(Hydroxylimino)bisethanesulphonicacid, disodium salt (DSEHA)**  
 Oral LD50 >2,000 mg/kg (rat)
- 111-42-2 diethanolamine**  
 Oral LD50 1,600 mg/kg (rat)  
 Dermal LD50 12,200 mg/kg (rabbit)
- 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)**  
 Oral LD50 >2,000 mg/kg (rat)
- . **Primary irritant effect:**
  - . **Skin corrosion/irritation**  
 Causes skin irritation.

(Contd. on page 6)

EN

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 5)

- . **Serious eye damage/irritation**  
Causes serious eye irritation.
- . **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- . **Additional toxicological information:**
- . **Acute effects (acute toxicity, irritation and corrosivity)**  
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:  
Irritant
- . **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.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:**
- 111-42-2 diethanolamine**  
LC50 133-140 mg/l (daphnia magna (Water flea))  
500-<5,000 mg/l (fish)
- 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))
- . **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:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
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.
- . **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

(Contd. on page 7)

EN

# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 6)

- . **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

. <b>14.1 UN-Number</b>	
. <b>ADR, ADN, IMDG, IATA</b>	Void
. <b>14.2 UN proper shipping name</b>	
. <b>ADR, ADN, IMDG, IATA</b>	Void
. <b>14.3 Transport hazard class(es)</b>	
. <b>ADR, ADN, IMDG, IATA</b>	
. <b>Class</b>	Void
. <b>14.4 Packing group</b>	
. <b>ADR, IMDG, IATA</b>	Void
. <b>14.5 Environmental hazards:</b>	
. <b>Marine pollutant:</b>	No
. <b>14.6 Special precautions for user</b>	Not applicable.
. <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
. <b>UN "Model Regulation":</b>	Void

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **Labelling according to Regulation (EC) No 1272/2008 GHS label elements**
- . **Directive 2012/18/EU**
- . **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**
  - H302 Harmful if swallowed.
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - 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.
- . **Department issuing SDS:** Department product safety
- . **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
  - ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
  - 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

(Contd. on page 8)



# Safety data sheet

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

Printing date 08.03.2021

version no: 6

Revision: 08.03.2021

**Trade name: COLORTEC® RA-4 PROFESSIONAL PRINT KIT RT**  
**Colour Developer CD Part 2**

(Contd. of page 7)

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

vPvB: very Persistent and very Bioaccumulative

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

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

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

**TETENAL**

Printing date 08.03.2021

version no: 9

Revision: 08.03.2021

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

**1.1 Product identifier**

**Trade name:** COLORTEC© C-41/ E6  
Bleach Fix BX Part 1

**Article number:**

102221 BX Part 1, 102124 BX Part 1, 102036 BX Part 1, 102035 BX Part 1, 102230 BX Part 1

**Index number:**

None of the ingredients is listed.

**UFI:** AS31-50CD-100D-RU44

**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** Bleachfix preparation 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**

The product is not classified, according to the 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**

**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: consisting of the following components.

**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:** Immediately remove any clothing/shoes soiled by the product.

**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.

(Contd. on page 2)

# Safety data sheet

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

Printing date 08.03.2021

version no: 9

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 1**

(Contd. of page 1)

- . **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.
- . **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** No further relevant information available.
- . **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
- . **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).
- . **6.4 Reference to other sections** No dangerous substances are released.

### 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:** Store away from foodstuffs.
- . **Further information about storage conditions:** Recommended storage temperature: 5-30°C
- . **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:**  
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**
- . **Personal protective equipment:**
- . **General protective and hygienic measures:** Avoid contact with the skin.
- . **Respiratory protection:** Not required.
- . **Protection of hands:**  
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

(Contd. on page 3)

# Safety data sheet

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

Printing date 08.03.2021

version no: 9

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 1**

(Contd. of page 2)

**. Material of gloves**

Butyl rubber, BR  
 Nitrile rubber, NBR  
 Neoprene 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.

**. Eye protection:** Safety glasses

**. 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>	red brown
<b>. Odour:</b>	Odourless

**. pH-value at 20 °C:** ~7

**. Change in condition**

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

**. 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:** ~1.2 g/cm<sup>3</sup>

**. Solubility in / Miscibility with water:**

Fully miscible.

**. Solvent content:**

<b>Organic solvents:</b>	0.7 %
<b>Water:</b>	50-90 %

**Solids content:** 0.0 %

**. 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** No dangerous reactions known.

**. 10.4 Conditions to avoid** No further relevant information available.

**. 10.5 Incompatible materials:** No further relevant information available.

(Contd. on page 4)

# Safety data sheet

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

Printing date 08.03.2021

version no: 9

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 1**

(Contd. of page 3)

. **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.

. **Primary irritant effect:**

. **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.

. **Additional toxicological information:**

. **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.

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

### 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.

. **Additional ecological information:**

. **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Danger to drinking water if even small quantities leak into the ground.

. **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 05 bleach solutions and bleach fixer 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, ADN, IMDG, IATA**

Void

(Contd. on page 5)

# Safety data sheet

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

Printing date 08.03.2021

version no: 9

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 1**

(Contd. of page 4)

. 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 Transport in bulk according to Annex II of Marpol and the IBC Code	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.	
. Directive 2012/18/EU . 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.	
. 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.

. **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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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

### 1.1 Product identifier

**Trade name:** COLORTEC® C-41/ E6  
Bleach Fix BX Part 2

### Article number:

102221 BX Part 2, 102124 BX Part 2, 102035 BX Part 2, 102036 BX Part 2, 102230 BX Part 2

### Index number:

None of the ingredients is listed.

**UFI:** F850-10WT-P005-6DNX

### 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** Bleachfix preparation 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

The product is not classified, according to the 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

#### 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: consisting of the following components.

#### Dangerous components:

CAS: 7631-90-5	sodium bisulphite	5-10%
EINECS: 231-548-0	⚠ Acute Tox. 4, H302	
Index number: 016-064-00-8		

**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.

(Contd. on page 2)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 2**

(Contd. of page 1)

- . **After eye contact:** Rinse opened eye for several (15 min) under running water.
- . **After swallowing:**  
If symptoms persist consult doctor.  
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:**  
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>)  
Sulphur dioxide (SO<sub>2</sub>)
- . **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
- . **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).  
Pick up mechanically.
- . **6.4 Reference to other sections** No dangerous substances are released.

### 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:** 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
- . **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:**  


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**7681-57-4 sodium metabisulphite (1-5%)**  
WEL Long-term value: 5 mg/m<sup>3</sup>

(Contd. on page 3)



# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 2**

(Contd. of page 2)

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

. **8.2 Exposure controls**

. **Personal protective equipment:**

. **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

. **Respiratory protection:** Ensure adequate ventilation

. **Protection of hands:**

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

. **Eye protection:** Safety glasses

. **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>	Sulfurous

. **pH-value at 20 °C:** ~5

. **Change in condition**

**Melting point/freezing point:** Undetermined.

**Initial boiling point and boiling range:** > 100 °C

. **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:** ~1.3 g/cm<sup>3</sup>

. **Solubility in / Miscibility with water:**

Fully miscible.

. **Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

. **Solvent content:**

**Organic solvents:** 0.4 %

(Contd. on page 4)

# Safety data sheet

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

Printing date 08.03.2021

version no: 10

Revision: 08.03.2021

**Trade name: COLORTEC® C-41/ E6**  
**Bleach Fix BX Part 2**

(Contd. of page 3)

<b>Water:</b>	25-50 %
<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** 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:** 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:**
- 
- 7631-90-5 sodium bisulphite**  
 Oral LD50 1540 mg/kg (rat)
- . **Primary irritant effect:**
  - . **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.
  - . **Additional toxicological information:**
  - . **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.
  - . **Aspiration hazard** Based on available data, the classification criteria are not met.

### 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.
- . **Additional ecological information:**
- . **General notes:**  
 Do not allow product to reach ground water, water course or sewage system.  
 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.

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(Contd. on page 5)

# Safety data sheet

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(Contd. of page 4)

### 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 05 bleach solutions and bleach fixer 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

- |  |                 |
|--|-----------------|
| . <b>14.1 UN-Number</b>  |                 |
| . <b>ADR, ADN, IMDG, IATA</b>  | Void            |
| . <b>14.2 UN proper shipping name</b>  |                 |
| . <b>ADR, ADN, IMDG, IATA</b>  | Void            |
| . <b>14.3 Transport hazard class(es)</b>   |                 |
| . <b>ADR, ADN, IMDG, IATA</b>  |                 |
| . <b>Class</b>   | Void            |
| . <b>14.4 Packing group</b>  |                 |
| . <b>ADR, IMDG, IATA</b>   | Void            |
| . <b>14.5 Environmental hazards:</b>   |                 |
| . <b>Marine pollutant:</b>   | No              |
| . <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| . <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| . <b>UN "Model Regulation":</b>  | Void            |
- . **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: 65
  - . **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.
  - . **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**  
H302 Harmful if swallowed.
- . **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)

(Contd. on page 6)

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according to 1907/2006/EC, Article 31

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(Contd. of page 5)

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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  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity - oral – Category 4  
\* **Data compared to the previous version altered.**

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