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

TETENAL

Printing date 08.04.2021 version no: 4 Revision: 08.03.2021

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

. **1.1 Product identifier**

. **Trade name:** **COLORTEC© E-6**
First Developer FD

. **Article number:** 102036 FD, 102035 FD
. **Index number:**
None of the ingredients is listed.
. **UFI:** C960-406K-C003-4GNQ
. **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.

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. **Additional information:**
Contains 4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP). 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 Chemical characterisation: Mixtures**
. **Description:** Mixture of substances listed below and with nonhazardous additions.

. **Dangerous components:**

CAS: 21799-87-1 EINECS: 244-584-7	Potassium 2,5-dihydroxybenzenesulphonate Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	5-10%
CAS: 584-08-7 EINECS: 209-529-3 Reg.nr.: 01-2119532646-36	potassium carbonate Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	5-10%
CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6	diethylene glycol Acute Tox. 4, H302	5-10%
CAS: 7758-02-3 EINECS: 231-830-3 Reg.nr.: 01-2119962195-33	potassium bromide Eye Irrit. 2, H319	1-5%
CAS: 13047-13-7 EINECS: 235-920-3	4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP) Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317	<1%

. **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 skin contact:** Immediately rinse with water.
. **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
. **After swallowing:** 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:** 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)
. **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** 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**
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:**
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:**

111-46-6 diethylene glycol (5-10%)
WEL Long-term value: 101 mg/m³, 23 ppm
. **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/m³ (Worker (Arbeiter))
	Long-term - systemic effects	12 mg/m³ (Consumer (Verbraucher))
	Long-term- systemics effects	44 mg/m³ (Worker (Arbeiter))

7758-02-3 potassium bromide

Oral	Long-term - systemic effects	0.475 mg/kg bw/day (-)
Dermal	Akute /short-term exposure - local effects	mg/kg bw/day (no hazard identified)
	Long-term - systemic - effects	95 mg/kg bw/day (-)
	Long-term - local - effects, worker	mg/kg bw/Day (no hazard identified)
	Long-term - systemic effects	95 mg/kg bw/day (-)
Inhalative	Akute /short-term exposure - local effects	mg/m³ (no hazard identified)

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Akute-lokale Effekte	mg/m³ (no hazard identified)
Long-term - systemic effects	1.66 mg/m³ (-)
Long-term - local effects	mg/m³ (no hazard identified)
Long-term - systemic-effects	4.75 mg/m³ (-)

. **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 (-)

7758-02-3 potassium bromide

Aquatic compartment - freshwater	0.52 mg/l (-)
Aquatic compartment - marine water	41 mg/l (-)
Aquatic compartment -sediment in marine water	3.2 mg/kg sed dw (-)
Sewage treatment plant (Abwasserreinigungsanlagen)	100 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.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
. **Respiratory protection:** Ensure adequate ventilation
. **Protection of hands:**
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**

Gove 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:** Goggles recommended during refilling
. **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**	
. **Appearance:**	
Form:	Fluid
Colour:	Light yellow
. **Odour:**	Recognisable
. **Odour threshold:**	Not determined.
. **pH-value at 20 °C:**	~10
. **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>100 °C
. **Flash point:**	Not applicable.
. **Flammability (solid, gas):**	Not applicable.
. **Ignition temperature:**	230 °C
. **Decomposition temperature:**	Not determined.
. **Auto-ignition temperature:**	Product is not selfigniting.
. **Explosive properties:**	Product does not present an explosion hazard.
. **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
. **Vapour pressure at 20 °C:**	23 hPa
. **Density at 20 °C:**	~1.3 g/cm³
. **Relative density**	Not determined.
. **Vapour density**	Not determined.
. **Evaporation rate**	Not determined.
. **Solubility in / Miscibility with water:**	Fully miscible.
. **Partition coefficient: n-octanol/water:**	Not determined.
. **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
. **Solvent content:**	
Organic solvents:	5.1 %
Water:	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:** Stable at environment temperature.
. **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.

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. **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:**

21799-87-1 Potassium 2,5-dihydroxybenzenesulphonate
Oral LD50 >10,000 mg/kg (rat)

584-08-7 potassium carbonate
Oral LD50 >2,000 mg/kg (rat)

111-46-6 diethylene glycol
Oral LD50 12,565 mg/kg (rat)

7758-02-3 potassium bromide
Oral LD50 3,070 mg/kg (rat)

13047-13-7 4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP)
Oral LD50 566 mg/kg (rat)

. **Primary irritant effect:**
. **Skin corrosion/irritation**
Causes skin irritation.
. **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:**
. **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.

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)

13047-13-7 4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP)
LC50 1-10 mg/l (fish)

. **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 2 (German Regulation) (Self-assessment): hazardous for water
Danger to drinking water if even small quantities leak into the ground.

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. **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**
Rinse out concentrate residues with some of the water used for the solution and add to the solution in question. Return the containers for recycling without concentrate residues. For further information on waste management techniques for photographic chemicals please contact the local environmental authorities.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
. **European waste catalogue**
09 01 01* water-based developer and activator solutions

. **Uncleaned packaging:**
. **Recommendation:** Disposal must be made according to official regulations.
. **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

. **14.1 UN-Number**	
. **ADR, ADN, IMDG, IATA**	Void
. **14.2 UN proper shipping name**	
. **ADR**	Void
. **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**
. **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
. **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.

. **National regulations:**
. **Regulation (EC) No 648/2004 on detergents / Labelling for contents**
phosphonates <5%

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. **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.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H411 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)
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)
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. 4: Acute toxicity - oral – 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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

. *** 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© E-6**
Colour Developer

. **Article number:** 102036 CD-Part 1, 102035 CD Part 1
. **Index number:**
None of the ingredients is listed.
. **UFI:** 2J60-N08S-800K-3HDW
. **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 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**

GHS05

. **Signal word** Warning
. **Hazard statements**
H290 May be corrosive to metals.
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.
P234	Keep only in original packaging.
P264	Wash thoroughly after handling.
P280	Wear protective gloves / eye protection / face 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.

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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.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosion resistant container / container with a resistant inner liner.

. **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 EINECS: 213-907-1	Tripotassium orthophosphate Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-<25%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6 Reg.nr.: 01-2119457892-27	sodium hydroxide (caustic soda) Met. Corr.1, H290; Skin Corr. 1A, H314	1-2%

. **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:**
Induce vomiting and call for medical help.
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:**
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.

SECTION 6: Accidental release measures

. **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation

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. **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**
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** 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:** No special requirements.
. **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with acids.
Store away from oxidising agents.
. **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store under lock and key and out of the reach of children.
Recommended storage temperature: 5-30°C
Protect from exposure to the light.
. **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

. **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:**

1310-73-2 sodium hydroxide (caustic soda) (<2.5%)

WEL Short-term value: 2 mg/m³
. **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:**
Not necessary if room is well-ventilated.
No personal respiratory protection required. In case of insufficient ventilation, excess of workplace limits, excessive odor or dusts, fibers and fumes, use self-contained breathing apparatus or breathing apparatus with filter type P2 or P3 according to EN 143.

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. **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**

Gove 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:**	
Form:	Fluid
Colour:	Light yellow
. **Odour:**	Recognisable
. **pH-value at 20 °C:**	>13
. **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 at 20 °C:**	23 hPa
. **Density at 20 °C:**	~1.2 g/cm³
. **Solubility in / Miscibility with water:**	Fully miscible.

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. **Solvent content:**	
Water:	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** 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:**

7778-53-2 Tripotassium orthophosphate

Oral LD50 4500 mg/kg (rat)

Dermal LD50 >4640 mg/kg (rabbit)

1310-73-2 sodium hydroxide (caustic soda)

Oral LD50 >2000 mg/kg (rat)

. **Primary irritant effect:**
. **Skin corrosion/irritation**
Causes skin irritation.
. **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:**
The preparation is "irritant". J.R. Young, M.J. How, A.P. Walker and W.M.H. Worth (1988): Classification as corrosive or irritant to skin of preparations containing acidic or alkaline substances, without testing on animals. Toxic. in Vitro, Bd.2, Nr.1, 1988, S.19-26].
. **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.

SECTION 12: Ecological information

. **12.1 Toxicity**
. **Aquatic toxicity:**

7778-53-2 Tripotassium orthophosphate

LC50 96h: 750 mg/l (fish)

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1310-73-2 sodium hydroxide (caustic soda)
EC50 24h: 76 mg/l (daphnia magna (Water flea))
LC50 48h: 99 mg/l (Lepomis macrochirus (Sonnenbarsch))
96h: 45.4 mg/l (fish: Oncorhynchus mykiss)

. **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.

SECTION 13: Disposal considerations

. **13.1 Waste treatment methods**
. **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
. **European waste catalogue**
09 01 01 water-based developer and activator solutions

. **Uncleaned packaging:**
. **Recommendation:** Disposal must be made according to official regulations.
. **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

. **14.1 UN-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 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.

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. **Directive 2012/18/EU**
. **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
. **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**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

. **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)
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)
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
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
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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TETENAL

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

. **1.1 Product identifier**

. **Trade name:** **COLORTEC© E-6**
Colour Developer CD-Part 2

. **Article number:** 102036 CD-Part 2, 102035 CD Part 2
. **Index number:**
None of the ingredients is listed.
. **UFI:** PJ10-907R-G00V-RQM5
. **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 Dam. 1	H318 Causes serious eye damage.
Skin Sens. 1	H317 May cause an allergic skin reaction.
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 GHS09

. **Signal word** Danger

. **Hazard-determining components of labelling:**
N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)
. **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
. **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.
P260	Do not breathe dusts or mists.

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P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
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.
P310	Immediately call a POISON CENTER/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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: 25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide 1-5%
EINECS: 247-161-5 sesquisulphate (CD-3)
Index number: 612-134-00-2 Acute Tox. 3, H301; Eye Dam. 1, H318; Aquatic Chronic
Reg.nr.: 01-2120794432-50-0001 1, H410; Skin Sens. 1, H317

. **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 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:** 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:** 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.

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. **5.3 Advice for firefighters**
. **Protective equipment:** 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:**
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).
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.
Store away from oxidising agents.
. **Further information about storage conditions:**
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:**
Avoid contact with the skin.
The usual precautionary measures are to be adhered to when handling chemicals.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

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Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

. **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
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**

Gove 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:**	
Form:	Fluid
Colour:	Light yellow
. **Odour:**	to sulfur dioxide
. **Odour threshold:**	Not determined.
. **pH-value at 20 °C:**	~2
. **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>100 °C
. **Flash point:**	Not applicable.
. **Flammability (solid, gas):**	Not applicable.

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. **Decomposition temperature:**	Not determined.
. **Auto-ignition temperature:**	Product is not selfigniting.
. **Explosive properties:**	Product does not present an explosion hazard.
. **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
. **Vapour pressure:**	Not determined.
. **Density at 20 °C:**	~1 g/cm³
. **Relative density**	Not determined.
. **Vapour density**	Not determined.
. **Evaporation rate**	Not determined.
. **Solubility in / Miscibility with water:**	Fully miscible.
. **Partition coefficient: n-octanol/water:**	Not determined.
. **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
. **Solvent content:**	
Water:	90-98 %
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:** 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:**

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**
Causes skin irritation.
. **Serious eye damage/irritation**
Causes serious eye damage.

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. **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
. **Additional toxicological information:**
The preparation is "irritant". J.R. Young, M.J. How, A.P. Walker and W.M.H. Worth (1988): Classification as corrosive or irritant to skin of preparations containing acidic or alkaline substances, without testing on animals. Toxic. in Vitro, Bd.2, Nr.1, 1988, S.19-26].
. **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 (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.

SECTION 12: Ecological information

. **12.1 Toxicity**
. **Aquatic toxicity:**

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.
. **Ecotoxical 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.
. **European waste catalogue**

09 01 01 water-based developer and activator solutions

. **Uncleaned packaging:**
. **Recommendation:** Disposal must be made according to official regulations.

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

*
SECTION 14: Transport information

. **14.1 UN-Number**	
. **ADR, IMDG, IATA**	Void
. **14.2 UN proper shipping name**	
. **ADR**	Void 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamnine derviate)
. **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.
. **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:**	
. **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**	-
. **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":**	UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.; 9; III

. **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
. **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.

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. **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.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
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)
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)
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
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
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 08.04.2021 version no: 9 Revision: 08.03.2021

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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 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.

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Safety data sheet
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Printing date 08.04.2021 version no: 9 Revision: 08.03.2021

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

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. **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:**
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** 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

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

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. **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 trough 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:**	
Form:	Fluid
Colour:	red brown
. **Odour:**	Odourless
. **pH-value at 20 °C:**	~7
. **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:**	~1.2 g/cm³
. **Solubility in / Miscibility with water:**	Fully miscible.
. **Solvent content:**	
Organic solvents:	0.7 %
Water:	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.

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

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Trade name: COLORTEC© C-41/ E6
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. **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 (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.

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

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Trade name: COLORTEC© C-41/ E6
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. **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.**

Safety data sheet
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TETENAL

Printing date 08.04.2021 version no: 10 Revision: 08.03.2021

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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 EINECS: 231-548-0 Index number: 016-064-00-8	sodium bisulphite Acute Tox. 4, H302	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**

. **After inhalation:** Supply fresh air; consult doctor in case of complaints.

. **After skin contact:** Immediately rinse with water.

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

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. **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:**
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 (NOx)
Sulphur dioxide (SO2)
. **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:**

7681-57-4 sodium metabisulphite (1-5%)

WEL Long-term value: 5 mg/m³

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Trade name: COLORTEC© C-41/ E6
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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:**
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 trough 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:**	
Form:	Fluid
Colour:	Light yellow
. **Odour:**	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/cm³
. **Solubility in / Miscibility with water:**	Fully miscible.
. **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
. **Solvent content:**	
Organic solvents:	0.4 %

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Trade name: COLORTEC© C-41/ E6
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Water:	25-50 %
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.
. **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 (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.

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

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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
. **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**
. **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)

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Trade name: COLORTEC© C-41/ E6
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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
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - oral – Category 4
. *** Data compared to the previous version altered.**

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

TETENAL

Printing date 08.04.2021 version no: 8 Revision: 08.03.2021

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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 / E-6**
Stabilizer STAB

. **Article number:** 102221 STAB, 102230 STAB, 102035 STAB, 102036 STAB
. **Index number:**
None of the ingredients is listed.
. **UFI:** A580-80DA-3000-P0G4
. **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** Stabilizer bath 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
. **Additional information:**
Contains 1,2-benzisothiazol-3(2H)-one, hexamethylenetetramine. 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 Chemical characterisation: Mixtures**
. **Description:** Mixture: consisting of the following components.

. **Dangerous components:**

CAS: 100-97-0 EINECS: 202-905-8 Index number: 612-101-00-2 Reg.nr.: 01-2119474895-20	hexamethylenetetramine Flam. Sol. 2, H228; Skin Sens. 1, H317	<1%
CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6	1,2-benzisothiazol-3(2H)-one Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	<1%

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SECTION 4: First aid measures

. **4.1 Description of first aid measures**
. **General information:** Take affected persons out into the fresh air.
. **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Supply fresh air.
. **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:** Use fire extinguishing methods suitable to surrounding conditions.
. **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**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

. **7.1 Precautions for safe handling** No special measures required.
. **Information about fire - and explosion protection:** No special measures required.

. **7.2 Conditions for safe storage, including any incompatibilities**
. **Storage:**
. **Requirements to be met by storerooms and receptacles:** No special requirements.
. **Information about storage in one common storage facility:** Store away from foodstuffs.
. **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store under lock and key and with access restricted to technical experts or their assistants only.
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.

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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.
Avoid contact with the eyes and skin.
. **Respiratory protection:**
Not required.
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.
Butyl rubber, BR
Nitrile rubber, NBR
Neoprene gloves
. **Penetration time of glove material**

Gove 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:** 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:**	
Form:	Fluid
Colour:	Colourless
. **Odour:**	Odourless
. **Odour threshold:**	Not determined.
. **pH-value at 20 °C:**	~8
. **Change in condition**	
Melting point/freezing point:	0 °C
Initial boiling point and boiling range:	100 °C
. **Flash point:**	Not applicable.
. **Flammability (solid, gas):**	Not applicable.
. **Decomposition temperature:**	Not determined.

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. **Auto-ignition temperature:**	Not determined.
. **Explosive properties:**	Product does not present an explosion hazard.
. **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
. **Vapour pressure at 20 °C:**	23 hPa
. **Density at 20 °C:**	~1 g/cm³
. **Relative density**	Not determined.
. **Vapour density**	Not determined.
. **Evaporation rate**	Not determined.
. **Solubility in / Miscibility with water:**	Fully miscible.
. **Partition coefficient: n-octanol/water:**	Not determined.
. **Viscosity:**	
Dynamic at 20 °C:	0.952 mPas
Kinematic:	Not determined.
. **Solvent content:**	
Water:	98-100 %
VOC (EC)	0.00 %
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:** Stable at environment temperature.
. **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:** 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.
. **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:**
. **Acute effects (acute toxicity, irritation and corrosivity)**
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.
. **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.

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. **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.

SECTION 13: Disposal considerations

. **13.1 Waste treatment methods**
. **Recommendation**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
. **European waste catalogue**

09 00 00 WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01 00 wastes from the photographic industry
09 01 99 wastes not otherwise specified

. **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
. **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.

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. **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**
. **Labelling according to Regulation (EC) No 1272/2008** GHS label elements

. **Directive 2012/18/EU**
. **Named dangerous substances - ANNEX I** Substance is not listed.
. **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.

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

non-ionic surfactants <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**
H228 Flammable solid.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
. **Contact:** E: sida@tetenal.com
. **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 2: Flammable solids – Category 2
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
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
. *** Data compared to the previous version altered.**