

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.02.2016

version no: 2

Revision: 03.02.2016

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

1.1 Product identifier

Trade name: **COLORTEC® C-41**
Colour Developer CD Part 1

Article number: 102221 CD-Part1

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 Europe GmbH
 Schützenwall 31-35
 D-22844 Norderstedt / Germany
 Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
 www.tetenal.com; E-Mail: info@tetenal.com

TETENAL Ltd.,
 2 Meridian West, Meridian Business Park, Leicester LE19 1WX
 Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com

Further information obtainable from: Department environment and safety. E-Mail: info@tetenal.com

1.4 Emergency telephone number: Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.

FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.



GHS08

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to the blood tissue through prolonged or repeated exposure.



GHS07

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

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R40: Limited evidence of a carcinogenic effect.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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. Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

. 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

GHS08

. Signal word Warning

. Hazard-determining components of labelling:

bis(hydroxylammonium) sulfate

. Hazard statements

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H373 May cause damage to the blood tissue through prolonged or repeated exposure.

. Precautionary statements

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

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

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: 10039-54-0 EINECS: 233-118-8 Index number: 612-123-00-2 Reg.nr.: 01-2119485971-25	bis(hydroxylammonium) sulfate Xn R21/22-40-48/22; Xi R36/38; Xi R43; E R2; N R50 Carc. Cat. 3 Carc. 2, H351; STOT RE 2, H373; Met. Corr. 1, H290; Aquatic Acute 1, H400; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	1- 5%
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. 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.

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- 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:**
If symptoms persist consult doctor.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- . **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- . **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- . **5.2 Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . **5.3 Advice for firefighters**
- . **Protective equipment:** No special measures required.

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**
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:** Protect from heat.
- . **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.
Store away from oxidising agents.
- . **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store under lock and key and out of the reach of children.
Recommended storage temperature: 5-30 °C
Protect from exposure to the light.

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

SECTION 8: Exposure controls/personal protection

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

. 8.1 Control parameters

. **Ingredients with limit values that require monitoring at the workplace:**

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:**

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.

. **Protection of hands:**



Protective gloves

Impervious gloves

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

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

. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. **Penetration time of glove material**

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

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

. **Eye protection:**



Tightly sealed goggles

. **Body protection:** Protective work clothing

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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:	Colourless
Odour:	Odourless

. pH-value at 20 °C: 3.6

. Change in condition

Melting point/Melting range:	0 °C
Boiling point/Boiling range:	> 100 °C

. Flash point: Not applicable.

. Self-igniting: Product is not selfigniting.

. Danger of explosion: Product does not present an explosion hazard.

. Vapour pressure at 20 °C: 23 hPa

. Density at 20 °C: ~1.01 g/cm³

. Solubility in / Miscibility with water:

Fully miscible.

. Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

. Solvent content:

Organic solvents:	0.0 %
Water:	>96 %

. 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:

10039-54-0 bis(hydroxylammonium) sulfate

Oral	LD50	600 mg/kg (rat)
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. 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.

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- . **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity**
Suspected of causing cancer.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure**
May cause damage to the blood tissue through prolonged or repeated exposure.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

10039-54-0 bis(hydroxylammonium) sulfate

EC50 48h: 1.62 mg/l (daphnia magna (Water flea))
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. **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.

. 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
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. Uncleaned packaging:

. Recommendation:

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

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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. 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

SECTION 15: Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
- . 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

. Relevant phrases

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to the blood tissue through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- R2 Risk of explosion by shock, friction, fire or other sources of ignition.
- R21/22 Harmful in contact with skin and if swallowed.
- R36/38 Irritating to eyes and skin.
- R40 Limited evidence of a carcinogenic effect.
- R43 May cause sensitisation by skin contact.
- R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R50 Very toxic to aquatic organisms.

. **Contact:** e-mail: 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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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, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

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

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

1.1 Product identifier

Trade name: **COLORTEC® C-41**
Colour Developer CD Part 2

Article number: 102221 CD-Part2, 102230 CD-Part2

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 Europe GmbH
 Schützenwall 31-35
 D-22844 Norderstedt / Germany
 Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
 www.tetenal.com; E-Mail: info@tetenal.com

TETENAL Ltd.,
 2 Meridian West, Meridian Business Park, Leicester LE19 1WX
 Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com

Further information obtainable from: Department environment and safety. E-Mail: info@tetenal.com

1.4 Emergency telephone number: Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.

FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.




GHS07

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

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

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

 Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

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. Hazard pictograms



GHS07

. Signal word Warning

. Hazard-determining components of labelling:

(4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)

. Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful 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.

P280 Wear protective gloves / eye protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

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: 25646-77-9	(4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)	1-5%
EINECS: 247-162-0	T R25; Xn R48/22; Xi R43; N R50/53	
Index number: 612-133-00-7	Acute Tox. 3, H301; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 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.. **After skin contact:** Immediately wash with water and soap and rinse thoroughly.. **After eye contact:** Rinse opened eye for several (15 min) under running water.

. After swallowing:

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

. 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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4.3 Indication of any immediate medical attention and special treatment needed

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No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

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

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

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:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Protect from heat and direct sunlight.

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

Recommended storage temperature: 5-30 °C

Protect from exposure to the light.

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

SECTION 8: Exposure controls/personal protection

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

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. 8.1 Control parameters

. **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

. 8.2 Exposure controls

. **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.

Avoid contact with the skin.

. **Respiratory protection:** Ensure adequate ventilation

. **Protection of hands:**



Protective gloves

Impervious gloves

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

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

. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

. **Penetration time of glove material**

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

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

. **Eye protection:**



Tightly sealed goggles

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:** to sulfur dioxide

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. pH-value at 20 °C:	4.3
. Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C
. Flash point:	Not applicable.
. Self-igniting:	Product is not selfigniting.
. Danger of explosion:	Product does not present an explosion hazard.
. Vapour pressure at 20 °C:	23 hPa
. Density at 20 °C:	~1.02 g/cm ³
. Solubility in / Miscibility with water:	Fully miscible.
. Solvent content:	
Organic solvents:	0.0 %
Water:	>92 %
. 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:

25646-77-9 (4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)

Dermal	LD50	>2000 mg/kg (rat)
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- . 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
May cause an allergic skin reaction.
- . CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- . Germ cell mutagenicity Based on available data, the classification criteria are not met.
- . Carcinogenicity Based on available data, the classification criteria are not met.
- . Reproductive toxicity Based on available data, the classification criteria are not met.
- . STOT-single exposure Based on available data, the classification criteria are not met.
- . STOT-repeated exposure Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

25646-77-9 (4-ammonio-m-tolyl)ethyl(2-hydroxyethyl)ammonium sulphate (CD-4)

LC50 96h: 0.75 mg/l (daphnia magna (Water flea))

96h: 0.5-1.0 mg/l (fish: Pimephales promelas)

. **12.2 Persistence and degradability** No further relevant information available.

. **12.3 Bioaccumulative potential** No further relevant information available.

. **12.4 Mobility in soil** No further relevant information available.

. Ecotoxicological effects:

. **Remark:** Toxic for fish

. Additional ecological information:

. General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

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

. 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

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. 14.4 Packing group . ADR, IMDG, IATA	Void
. 14.5 Environmental hazards:	Not applicable.
. 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

SECTION 15: Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
- . 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.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

- R25 Toxic if swallowed.
- R43 May cause sensitisation by skin contact.
- R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

. **Contact:** e-mail: 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, Hazard Category 3
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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

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

- 1.1 Product identifier**
- . **Trade name:** **COLORTEC® C-41**
Coulor Developer CD-Part 3
 - . **Article number:** 102221 CD-Part3, 102230 CD-Part3
 - . **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 Europe GmbH
Schützenwall 31-35
D-22844 Norderstedt / Germany
Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
www.tetenal.com; E-Mail: info@tetenal.com
 - . TETENAL Ltd.,
2 Meridian West, Meridian Business Park, Leicester LE19 1WX
Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com
 - . **Further information obtainable from:** Department environment and safety. E-Mail: info@tetenal.com
 - . **1.4 Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

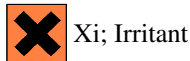
- 2.1 Classification of the substance or mixture**
- . **Classification according to Regulation (EC) No 1272/2008**
Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.
FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.



GHS07

- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.

- . **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

- R36/38: Irritating to eyes and skin.
- . **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- . **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements**
- . **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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. 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.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves / eye protection.

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

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

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. **PBT:** Not applicable.. **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

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

. Dangerous components:

CAS: 584-08-7 EINECS: 209-529-3 Reg.nr.: 01-2119532646-36	potassium carbonate ☒ Xi R36/37/38 ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 140-01-2 EINECS: 205-391-3 Reg.nr.: 01-2119474445-33	Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5) ☒ Xn R20-63; ☒ Xi R36/38 Repr. Cat. 2 ☒ Repr. 2, H361d; ☒ Met. Corr.1, H290; ☒ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%

. **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 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:

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

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- . **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
- . **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** 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:** No special requirements.
- . **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidising agents.
- . **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
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.

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SECTION 8: Exposure controls/personal protection

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

. **8.1 Control parameters**

. **Ingredients with limit values that require monitoring at the workplace:**

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:**

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 required.

. **Protection of hands:**



Protective gloves

Impervious gloves

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

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

. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. **Penetration time of glove material**

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

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

. **Eye protection:**



Tightly sealed goggles

. **Body protection:** Protective work clothing

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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: Yellow
Odour: Odourless

. pH-value at 20 °C: 11

. Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

. Flash point: Not applicable.

. Self-igniting: Product is not selfigniting.

. Danger of explosion: Product does not present an explosion hazard.

. Vapour pressure at 20 °C: 23 hPa

. Density at 20 °C: ~1.157 g/cm³

. Solubility in / Miscibility with water:

Fully miscible.

. Viscosity:

Dynamic: Not determined.
Kinematic: Not determined.

. Solvent content:

Organic solvents: 0.0 %
Water: >68 %

. 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:

584-08-7 potassium carbonate

Oral	LD50	>2000 mg/kg (rat)
------	------	-------------------

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

Oral	LD50	>2000 mg/kg (rat)
------	------	-------------------

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- . **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.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

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

EC50	48h: >500 mg/l (daphnia magna (Water flea))
	48h: >500 mg/l (Invertebrates)
LC50	96h: 1115 mg/l (fish)
	96h: >1000 mg/l (Lepomis macrochirus (Sonnenbarsch))

- . **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:**
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

. 13.1 Waste treatment methods

. Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

. European waste catalogue

09 01 01*	water-based developer and activator solutions
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. Uncleaned packaging:

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

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SECTION 14: Transport information

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

SECTION 15: Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
- . 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.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H361d Suspected of damaging the unborn child.

- R20 Harmful by inhalation.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R36/38 Irritating to eyes and skin.
- R63 Possible risk of harm to the unborn child.

. **Contact:** e-mail: 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

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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, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Repr. 2: Reproductive toxicity, 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® C-41/ E6**
Bleach Fix BX Part 1
 - . **Article number:** 102221 BX-Part1, 102230 BX-Part1, 102036 BX-Part1
 - . **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 Europe GmbH
Schützenwall 31-35
D-22844 Norderstedt / Germany
Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
www.tetenal.com; E-Mail: info@tetenal.com
 - . TETENAL Ltd.,
2 Meridian West, Meridian Business Park, Leicester LE19 1WX
Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com
 - . **Further information obtainable from:** Department environment and safety. E-Mail: info@tetenal.com
 - . **1.4 Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

- . **2.1 Classification of the substance or mixture**
- . **Classification according to Regulation (EC) No 1272/2008**
Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.
FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.
The product is not classified according to the CLP regulation.
- . **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- . **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
No hazards to be particularly mentioned. Please note the information of this Material Safety Data Sheet.
- . **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- . **2.2 Label elements**
- . **Labelling according to Regulation (EC) No 1272/2008** Void
- . **Hazard pictograms** Void
- . **Signal word** Void
- . **Hazard statements** Void
- . **Precautionary statements** KEEP OUT OF REACH OF CHILDREN
- . **Additional information:**
Safety data sheet available on request.
- . **2.3 Other hazards**
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.

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. vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

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

. Not hazardous components:

CAS: 68413-60-5	Ammonium ferric ethylenediaminetetraacetic acid (Ferric ammonium	25-50%
EINECS: 270-232-7	ethylenediaminetetraacetate complex)	

. **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.

. 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.

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- . **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:**
 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

- . **Additional information about design of technical facilities:** No further data; see item 7.
- . **8.1 Control parameters**
- . **Ingredients with limit values that require monitoring at the workplace:**
 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
- . **Material of gloves**
 Butyl rubber, BR
 Nitrile rubber, NBR
 Neoprene gloves
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- . **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- . **Eye protection:** Safety glasses
- . **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- . **9.1 Information on basic physical and chemical properties**
- . **General Information**
- . **Appearance:**
- . **Form:** Fluid
- . **Colour:** reddish brown
- . **Odour:** Odourless
- . **pH-value at 20 °C:** 6.8

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. Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C
. Flash point:	Not applicable.
. Self-igniting:	Product is not selfigniting.
. Danger of explosion:	Product does not present an explosion hazard.
. Vapour pressure at 20 °C:	23 hPa
. Density at 20 °C:	~1.24 g/cm ³
. Solubility in / Miscibility with water:	Fully miscible.
. Solvent content:	
Organic solvents:	0.7 %
Water:	>59 %
. 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.
- . **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.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.

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- . **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 |
| . 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 |

SECTION 15: Regulatory information

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- . **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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-mail: sida@tetenal.com

. **Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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

. 1.1 Product identifier

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

. Article number: 102221 BX-Part2, 102230 BX-Part2, 102036 BX-Part2

. 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 Europe GmbH
Schützenwall 31-35
D-22844 Norderstedt / Germany
Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
www.tetenal.com; E-Mail: info@tetenal.com

TETENAL Ltd.,

2 Meridian West, Meridian Business Park, Leicester LE19 1WX

Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com

TETENAL LTD., Tetenal House, Centurion Way, Meridian Industrial Estate, Leicester LE19 1WH/Great Britain, Tel. 0116-263 03 06, Fax 0116-263 00 87, eMail: uk@tetenal.com

. Further information obtainable from: Department environment and safety. E-Mail: info@tetenal.com

. 1.4 Emergency telephone number: Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

. 2.1 Classification of the substance or mixture

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

Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.

FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.

The product is not classified according to the CLP regulation.

. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

. Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

No hazards to be particularly mentioned. Please note the information of this Material Safety Data Sheet.

. Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

. 2.2 Label elements

. Labelling according to Regulation (EC) No 1272/2008 Void

. Hazard pictograms Void

. Signal word Void

. Hazard statements Void

. Additional information:

Safety data sheet available on request.

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. PBT: Not applicable.

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. vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

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

. Dangerous components:

CAS: 7631-90-5	sodium bisulphite	☒ Xn R22	5-10%
EINECS: 231-548-0		R31	
Index number: 016-064-00-8		☠ Acute Tox. 4, H302	

. Not hazardous components:

CAS: 7783-18-8	Ammonium thiosulphate		25-50%
EINECS: 231-982-0			
Reg.nr.: 01-2119537325-41			

. **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

. 4.1 Description of first aid measures

. **After inhalation:** Supply fresh air; consult doctor in case of complaints.. **After skin contact:** Immediately rinse with water.. **After eye contact:** Rinse opened eye for several (15 min) under running water.

. After swallowing:

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 (NO_x)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.

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. **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

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

. 8.1 Control parameters

. **Ingredients with limit values that require monitoring at the workplace:**

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

WEL | Long-term value: 5 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:**

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

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

. **Respiratory protection:** Ensure adequate ventilation

. **Protection of hands:**

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

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

. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. **Penetration time of glove material**

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

. **Eye protection:** Safety glasses

. **Body protection:** Protective work clothing

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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

. pH-value at 20 °C: 5.4

. Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C

. Flash point: Not applicable.

. Self-igniting: Product is not selfigniting.

. Danger of explosion: Product does not present an explosion hazard.

. Vapour pressure at 20 °C: 23 hPa

. Density at 20 °C: ~1.34 g/cm³

. Solubility in / Miscibility with water:

Fully miscible.

. Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

. Solvent content:

Water: >40 %

. 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.

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- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.
- . **Additional ecological information:**
- . **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

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 | Void |
| . Class | Void |
| . 14.4 Packing group | |
| . ADR, IMDG, IATA | Void |

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. 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

SECTION 15: Regulatory information

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

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

- . Contact:** e-mail: 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. 4: Acute toxicity, Hazard Category 4

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

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

- 1.1 Product identifier**
- Trade name:** **COLORTEC® C-41 / E-6 Stabilizer STAB**
- Article number:** 102221 STAB, 102230 STAB, 102036 STAB
- 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 Europe GmbH
Schützenwall 31-35
D-22844 Norderstedt / Germany
Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296
www.tetenal.com; E-Mail: info@tetenal.com
- TETENAL Ltd.,
2 Meridian West, Meridian Business Park, Leicester LE19 1WX
Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com
- Further information obtainable from:** Department environment and safety. E-Mail: info@tetenal.com
- 1.4 Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008**
Avoid contact with eyes, skin and clothing. Avoid mist. Keep container closed. Use eye protection, chemical-resistant gloves and skin protection. Wash thoroughly after handling. Keep out of reach of children.
FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and immediately flush skin with soap and with plenty of water. Get medical attention if symptoms occur. If swallowed induce vomiting immediately as directed by medical personnel.



GHS07

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

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 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**



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Stabilizer STAB

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- . **Signal word** Warning
- . **Hazard-determining components of labelling:**
 - 1,2-benzisothiazol-3(2H)-one
 - hexamethylenetetramine
- . **Hazard statements**
 - H317 May cause an allergic skin reaction.
- . **Precautionary statements**
 - P102 Keep out of reach of children.
 - P264 Wash hands thoroughly after handling.
 - P280 Wear protective gloves / eye protection.
- . **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: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6	1,2-benzisothiazol-3(2H)-one T R23; Xn R22; Xi R38-41; Xi R43; N R50 Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	<0.1%
CAS: 100-97-0 EINECS: 202-905-8 Index number: 612-101-00-2 Reg.nr.: 01-2119474895-20	hexamethylenetetramine Xi R43; F R11 Flam. Sol. 2, H228; Skin Sens. 1, H317	<0.1%

. **Not hazardous components:**

CAS: 7732-18-5 EINECS: 231-791-2	water	>99%
-------------------------------------	-------	------

- . **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.
 - 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.

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Stabilizer STAB

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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:** 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:** Protect from heat.
- . **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.
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

- . **Additional information about design of technical facilities:** No further data; see item 7.
- . **8.1 Control parameters**
- . **Ingredients with limit values that require monitoring at the workplace:**
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.

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. Protection of hands:

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

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

. Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. Penetration time of glove material

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

. Eye protection: Safety glasses

. Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties**. General Information****. Appearance:**

Form: Fluid

Colour: Colourless

. Odour: Odourless

. Odour threshold: Not determined.

. pH-value at 20 °C: ~8

. Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

. Flash point: Not applicable.

. Flammability (solid, gaseous): Not applicable.

. Ignition temperature:

Decomposition temperature: Not determined.

. Self-igniting: Product is not selfigniting.

. Danger of explosion: 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.

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- | | |
|---|--|
| . Partition coefficient (n-octanol/water): Not determined. | |
| . Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| . Solvent content: | |
| Organic solvents: | 0.0 % |
| Water: | >99 % |
| VOC (EC) | 0.00 % |
| . 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- . **10.1 Reactivity** No further relevant information available.
- . **10.2 Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** 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**
May cause an allergic skin reaction.
- . **Acute effects (acute toxicity, irritation and corrosivity)**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.

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- . **Additional ecological information:**
- . **General notes:**
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
- . **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 99	wastes not otherwise specified

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

SECTION 14: Transport information

- | | |
|--|-----------------|
| . 14.1 UN-Number | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . 14.2 UN proper shipping name | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . 14.3 Transport hazard class(es) | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . Class | Void |
| . 14.4 Packing group | Void |
| . ADR, IMDG, IATA | Void |
| . 14.5 Environmental hazards: | No |
| . 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 |

SECTION 15: Regulatory information

- . **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** None of the ingredients is listed.

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. **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.

R11 Highly flammable.
 R22 Harmful if swallowed.
 R23 Toxic by inhalation.
 R38 Irritating to skin.
 R41 Risk of serious damage to eyes.
 R43 May cause sensitisation by skin contact.
 R50 Very toxic to aquatic organisms.

. **Contact:** e-mail: 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, Hazard Category 2
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

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

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