

08.07.2014

Kit Components

Product code	Description
102124 Kit	COLORTEC RA-4 Professional Print Kit RT for 5 Liter

Components:

102124	Colortec RA-4 Professional Print Kit RT Colour Developer
102124 CD-P2	Colortec RA-4 Prof. Print Kit RT CD-Part 2
102124 BX 1	Colortec RA-4 Prof. Print Bleachfix BX Part1
102124 BX-P2	Colortec RA-4 Prof. Print Bleachfix BX Part 2

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.07.2014

version no: 1

Revision: 08.07.2014

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

1.1 Product identifier

Trade name: COLORTEC RA-4 Professional Print Kit RT Colour Developer

Article number: 102124, Part 1

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



GHS09

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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

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



Xn; Harmful

R22: Harmful if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

R51/53: Toxic 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.

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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 EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

. Code letter and hazard designation of product:


Xn Harmful
N Dangerous for the environment

. Hazard-determining components of labelling:

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

. Risk phrases:

22 Harmful if swallowed.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

. Safety phrases:

24 Avoid contact with skin.
37 Wear suitable gloves.
57 Use appropriate container to avoid environmental contamination.

. 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 characterization: Mixtures

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

. Dangerous components:

CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6	diethylene glycol Xn R22 Acute Tox. 4, H302	25-50%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1	ethylene glycol / ethane-1,2-diol Xn R22 Acute Tox. 4, H302	10-25%
CAS: 25646-71-3 EINECS: 247-161-5 Index number: 612-134-00-2	N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3) Xn R22; Xi R43; N R50/53 Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317	5-10%

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

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SECTION 4: First aid measures

- . **4.1 Description of first aid measures**
- . **General information:** Immediately remove any clothing/shoes soiled by the product.
- . **After inhalation:**
 - Supply fresh air and to be sure call for a doctor.
 - In case of unconsciousness place patient stably in side position for transportation.
- . **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- . **After eye contact:**
 - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- . **After swallowing:**
 - Rinse out mouth and then drink plenty of water.
 - Do not induce vomiting; call for medical help immediately.
- . **4.2 Most important symptoms and effects, both acute and delayed**
 - No further relevant information available.
- . **4.3 Indication of any immediate medical attention and special treatment needed**
 - No further relevant information available.

SECTION 5: Firefighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
 - 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:**
 - 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.
 - 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**
 - Keep away from heat and direct sunlight.
 - Prevent formation of aerosols.
- . **Information about fire - and explosion protection:** No special measures required.

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. 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 oxidizing 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: 5-25 °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.

. 8.1 Control parameters

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

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

WEL (Great Britain)	Long-term value: 101 mg/m ³ , 23 ppm
WEEL (USA)	Long-term value: 10 mg/m ³

107-21-1 ethylene glycol / ethane-1,2-diol (10-<25%)

WEL (Great Britain)	Short-term value: 104** mg/m ³ , 40** ppm Long-term value: 10* 52** mg/m ³ , 20** ppm Sk *particulate **vapour
IOELV (EU)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin
TLV (USA)	Short-term value: C 100 mg/m ³ H

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

. 8.2 Exposure controls

. Personal protective equipment:

. General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

. Respiratory protection:

Not necessary if room is well-ventilated.

required at the appearance from fumes/vapours/aerosol. Filter ABEK

. 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

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. 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

Neoprene gloves

Nitrile rubber, NBR

. Penetration time of glove material

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

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

. Eye protection:



Tightly sealed goggles

. Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Fluid

Colour: Light red

. Odour: Pungent
to sulfur dioxide

. pH-value at 20 °C: 2

. Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: > 100 °C

. Flash point: Not applicable.

. Ignition temperature: 230 °C

. Self-igniting: Product is not selfigniting.

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

. Explosion limits:

Lower: 0.7 Vol %

Upper: 53.0 Vol %

. Vapour pressure at 20 °C: 23 hPa

. Density at 20 °C: 1.097 g/cm³

. Solubility in / Miscibility with water: Fully miscible.

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- . **Solvent content:**
- Organic solvents:** 25.8 %
- Water:** >44 %
- . **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- . **10.1 Reactivity**
- . **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 oxidizing 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:**

- . **LD/LC50 values relevant for classification:**

25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)

Oral	LD50	931 mg/kg (rat)
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- . **Primary irritant effect:**
 - . **on the skin:** No irritant effect.
 - . **on the eye:** No irritating effect.
 - . **Sensitization:** Sensitization possible through skin contact.
 - . **Additional toxicological information:**
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
- Harmful
Irritant

SECTION 12: Ecological information

- . **12.1 Toxicity**

- . **Aquatic toxicity:**

25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)

LC50	96h: 1.8 mg/L (fat)
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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.
 - . **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 3 (German Regulation) (Self-assessment): extremely hazardous for water
Danger to drinking water if even extremely small quantities leak into the ground.

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- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

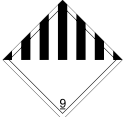

- . **13.1 Waste treatment methods**
- . **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- . **European waste catalogue**

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.

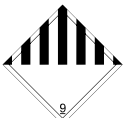

SECTION 14: Transport information

- . **14.1 UN-Number**
- . **ADR, IMDG, IATA** UN3082
- . **14.2 UN proper shipping name**
- . **ADR** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine derivate CD-3)
- . **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine derivate CD-3), MARINE POLLUTANT
- . **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine derivate CD-3)
- . **14.3 Transport hazard class(es)**
- . **ADR**

- . **Class** 9 (M6) Miscellaneous dangerous substances and articles.
- . **Label** 9

- . **IMDG, IATA**

- . **Class** 9 Miscellaneous dangerous substances and articles.
- . **Label** 9
- . **14.4 Packing group**
- . **ADR, IMDG, IATA** III

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. 14.5 Environmental hazards:	Product contains environmentally hazardous substances: p-Phenylenediamine derivate CD-3
. Marine pollutant:	Yes
. Special marking (ADR):	Symbol (fish and tree)
. Special marking (IATA):	Symbol (fish and tree)
. 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
. Danger code (Kemler):	90
. EMS Number:	F-A,S-F
. 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
. Transport/Additional information:	
. ADR	
. Limited quantities (LQ)	5L
. Transport category	3
. Tunnel restriction code	E
. UN "Model Regulation":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (p-Phenylenediamine derivate CD-3), 9, III

SECTION 15: Regulatory information

. **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.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

. **Department issuing MSDS:** Department product safety

. **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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized 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)

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Trade name: COLORTEC RA-4 Professional Print Kit RT Colour Developer

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic 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 RA-4 Prof. Print Kit RT CD-Part 2

. Article number: 102124 CD-P2, 44124

. 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

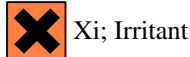


Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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



R36/38: Irritating to eyes and skin.

. 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 EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

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. Code letter and hazard designation of product:


Xi Irritant

. Risk phrases:

36/38 Irritating to eyes and skin.

. Safety phrases:

60 This material and its container must be disposed of as hazardous waste.

. 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 characterization: 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 R36/38 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-<25%
CAS: 133986-51-3	2,2'-(Hydroxylimino)bisethanesulphonicacid, disodium salt (SEHA) Xi R36 R52/53 Eye Irrit. 2, H319; Aquatic Chronic 3, H412	5-10%
CAS: 111-42-2 EINECS: 203-868-0 Index number: 603-071-00-1	diethanolamine Xn R22-48/22; Xi R38-41 STOT RE 2, H373; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	1- <2%

. Not hazardous components:

CAS: 7732-18-5 EINECS: 231-791-2	water	50-90%
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. Additional information: For the wording of the listed risk 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 minutes under running water. Then consult a doctor.

. 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.

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- . **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).
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** 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:**
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: 5-25 °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.
- . **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.

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. 8.2 Exposure controls

. Personal protective equipment:

. General protective and hygienic measures:

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

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

. Respiratory protection: Ensure adequate ventilation

. Protection of hands:



Protective gloves

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

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

. Material of gloves

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

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. Penetration time of glove material

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

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

. Eye protection:



Tightly sealed goggles

. Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Fluid

Colour: Light yellow

. Odour: Recognizable

. pH-value at 20 °C: 10.9

. Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: > 100 °C

. Flash point: Not applicable.

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. 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:	1.305 g/cm ³
. Solubility in / Miscibility with water:	Fully miscible.
. Solvent content:	
Organic solvents:	1.5 %
Water:	>63 %
. 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- . **10.1 Reactivity**
- . **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 oxidizing 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:**
- . **Primary irritant effect:**
- . **on the skin:** Irritant to skin and mucous membranes.
- . **on the eye:** Irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**
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.

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 undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.

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. **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

. **13.1 Waste treatment methods**

. **Recommendation**

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

. **European waste catalogue**

09 01 01	water-based developer and activator solutions
----------	---

. **Uncleaned packaging:**

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

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

SECTION 14: Transport information

. **14.1 UN-Number**

. **ADR, ADN, IMDG, IATA** Void

. **14.2 UN proper shipping name**

. **ADR, ADN, IMDG, IATA** Void

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

. **ADR, ADN, IMDG, IATA**

. **Class** Void

. **14.4 Packing group**

. **ADR, IMDG, IATA** Void

. **14.5 Environmental hazards:**

. **Marine pollutant:** No

. **14.6 Special precautions for user** Not applicable.

. **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

. **UN "Model Regulation":** -

SECTION 15: Regulatory information

. **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

. **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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- H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

. **Department issuing MSDS:** Department product safety

. **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)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized 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)
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
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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

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according to 1907/2006/EC, Article 31

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version no: 1

Revision: 07.07.2014

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

- . **1.1 Product identifier**
- . **Trade name:** Colortec RA-4 Prof. Print Bleachfix BX Part1
- . **Article number:** 102124 BX 1, 45474 Part 1
- . **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**
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.
- . **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- . **3.2 Chemical characterization: Mixtures**
- . **Description:** Mixture of substances listed below and with nonhazardous additions.

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Trade name: Colortec RA-4 Prof. Print Bleachfix BX Part1

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. Dangerous components:

CAS: 64-19-7	acetic acid	1-5%
EINECS: 200-580-7	 C R35	
Index number: 607-002-00-6	R10	
Reg.nr.: 01-2119475328-30	 Flam. Liq. 3, H226;  Skin Corr. 1A, H314	

. Additional information: For the wording of the listed risk 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:** 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).

Pick up mechanically.

. 6.4 Reference to other sections No dangerous substances are released.

SECTION 7: Handling and storage

. 7.1 Precautions for safe handling No special measures required.

. Information about fire - and explosion protection: No special measures required.

. 7.2 Conditions for safe storage, including any incompatibilities
. Storage:
. Requirements to be met by storerooms and receptacles: No special requirements.

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

. Further information about storage conditions:

Protect from heat and direct sunlight.

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

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Recommended storage temperature: 5-25 °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.

. **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**

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

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

. **Eye protection:** Safety glasses

. **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: Dark red

. **Odour:** Odourless

. **pH-value at 20 °C:** 6.7

. **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: > 100 °C

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. 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:	1.222 g/cm ³
. Solubility in / Miscibility with water:	Fully miscible.
. Solvent content:	
Organic solvents:	1.3 %
Water:	>61 %
. 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- . **10.1 Reactivity**
- . **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:**
- . **Primary irritant effect:**
- . **on the skin:** No irritant effect.
- . **on the eye:** No irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**
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.

SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.
- . **Additional ecological information:**
- . **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

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- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- . **13.1 Waste treatment methods**
 - . **Recommendation**
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 MARPOL73/78 and the IBC Code | Not applicable. |
| . UN "Model Regulation": | - |

SECTION 15: Regulatory information

- . **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**
- H226 Flammable liquid and vapour.
- H314 Causes severe skin burns and eye damage.

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R10 Flammable.

R35 Causes severe burns.

. **Department issuing MSDS:** Department product safety. **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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized 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)

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

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

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Revision: 08.07.2014

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

1.1 Product identifier

Trade name: Colortec RA-4 Prof. Print Bleachfix BX Part 2

Article number: 102124 BX-P2, 44593 Part 2

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

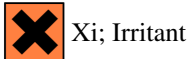
2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Eye Dam. 1 H318 Causes serious eye damage.

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



R36: Irritating to eyes.

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 EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



Risk phrases:

36 Irritating to eyes.

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Trade name: Colortec RA-4 Prof. Print Bleachfix BX Part 2

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. Safety phrases:

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 60 This material and its container must be disposed of as hazardous waste.

. 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 characterization: Mixtures

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

. Dangerous components:

CAS: 7681-57-4	sodium metabisulphite (sodium disulphite)	5-10%
EINECS: 231-673-0	☒ Xn R22; ☒ Xi R41	
Index number: 016-063-00-2	R31	
Reg.nr.: 01-2119531326-45	☒ Eye Dam. 1, H318; ☒ Acute Tox. 4, H302	

- . **Additional information:** For the wording of the listed risk 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 minutes under running water. If symptoms persist, consult a doctor.
- . **After swallowing:** If symptoms persist consult doctor.
- . **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- . **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

. 5.1 Extinguishing media
. Suitable extinguishing agents:

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).

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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

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

. Information about fire - and explosion protection: No special measures required.

. 7.2 Conditions for safe storage, including any incompatibilities

. Storage:

. Requirements to be met by storerooms and receptacles: No special requirements.

. Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing 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: 5-25 °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 (sodium disulphite) (5-10%)

WEL	Long-term value: 5 mg/m ³
-----	--------------------------------------

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

. 8.2 Exposure controls

. Personal protective equipment:

. General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

. Respiratory protection: Ensure adequate ventilation

. Protection of hands:

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

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

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. Penetration time of glove material

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

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

. Eye protection:


Tightly sealed goggles

. Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

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

Form:	Fluid
Colour:	Light yellow
Odour:	Pungent

. pH-value at 20 °C: 5.3

. 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: 1.364 g/cm³
. Solubility in / Miscibility with water:

Fully miscible.

. Solvent content:

Organic solvents:	0.0 %
Water:	40.5 %

. 9.2 Other information No further relevant information available.

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SECTION 10: Stability and reactivity

- . **10.1 Reactivity**
- . **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:**
- . **Primary irritant effect:**
- . **on the skin:** No irritant effect.
- . **on the eye:** Irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

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.

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. **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 MARPOL73/78 and the IBC Code	Not applicable.
. UN "Model Regulation":	-

SECTION 15: Regulatory information

. **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.

H318 Causes serious eye damage.

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R41 Risk of serious damage to eyes.

. **Department issuing MSDS:** Department product safety

. **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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized 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)

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Acute Tox. 4: Acute toxicity, Hazard Category 4
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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

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