

Product code	Description
102031 Kit	COLORTEC© E-6 3-Bath KIT

Components:

102031	COLORTEC E-6 3-Bad
102031 Part 1	COLORTEC E-6 3-Bad Farbewickler CD Part 1
102031 Part 2	COLORTEC E-6 3-Bad Colour Developer CD Part 2
102031 BX-P1	COLORTEC E-6 3 Bad BX-Part 1
102031 BX-P2	COLORTEC E-6 3-Bad BX Part 2
102031 Stab	COLORTEC E-6 3-Bad Stabilizer STAB

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

1: Identification

- . **1.1 Product identifier**
- . **Trade name:** COLORTEC E-6 3-Bath
- . **Article number:** 102031, 102034, Firstdeveloper, Premier Révélat
- . **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) 40 521 45-296
www.tetenal.com; E-mail: info@tetenal.com
- . **Information department:** Department environment and safety. E-Mail: info@tetenal.com
- . **1.4 Emergency telephone number:**
Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) identification

- . **2.1 Classification of the substance or mixture**
- . **Classification according to Regulation (EC) No 1272/2008**
WARNING! MAY CAUSE ALLERGIC SKIN REACTION. Avoid contact with skin. Wash thoroughly after handling.
First Aid: In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Destroy contaminated shoes. KEEP OUT OF REACH OF CHILDREN.



GHS07

- Eye Irrit. 2A H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.

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



Irritant

- May cause sensitisation by skin contact.

- . **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
- . **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- . **2.2 Label elements**

- . **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.
- . **Code letter and hazard designation of product:**



Xi Irritant

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. Hazard-determining components of labeling:

potassium 2,5-dihydroxybenzenesulphonate

. Risk phrases:

May cause sensitisation by skin contact.

. Safety phrases:

Keep out of the reach of children.

Avoid contact with skin.

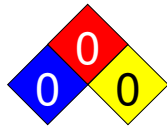
Wear suitable gloves.

If swallowed, seek medical advice immediately and show this container or label.

Dispose of this material and its container to hazardous or special waste collection point.

. Classification system:

. NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

. HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. PBT: Not applicable.

. vPvB: Not applicable.

3: Composition/information on ingredients

. 3.2 Chemical characterization: Mixtures

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

. Dangerous components:

CAS: 21799-87-1	potassium 2,5-dihydroxybenzenesulphonate	5-10%
CAS: 584-08-7 RTECS: TS 7750000 Reg.nr.: 01-2119532646-36	potassium carbonate	5-10%
CAS: 111-46-6 Index number: 603-140-00-6 RTECS: ID 5950000	diethylene glycol	5-10%
CAS: 13047-13-7	4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP)	<1%

4: First-aid measures

. 4.1 Description of first aid measures

. 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 minutes under running water. Then consult a doctor.

. After swallowing: If symptoms persist consult doctor.

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

No further relevant information available.

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- . **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5: Fire-fighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
CO₂, extinguishing 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.

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).
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.

7: Handling and storage

- . **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- . **Information about protection against explosions and fires:** 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.

8: Exposure controls/personal protection

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

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. 8.1 Control parameters

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

111-46-6 diethylene glycol (5-10%)

WEEL (USA) Long-term value: 10 mg/m³

. **Additional information:** The lists that were valid during the creation 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.

Avoid contact with the eyes and skin.

. **Breathing equipment:** 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	breakthroug-time	layer thickness
Butyl rubber:	>480 min	≥0,4mm
Nitrile rubber:	>480 min	≥0,38mm
Neoprene:	>240 min	≥0,65mm

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

. **Eye protection:** Safety glasses

. **Body protection:** Protective work clothing

9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Fluid

Color: Light yellow

. **Odor:** Recognizable

. **pH-value at 20 °C (68 °F):** 9.9

. Change in condition

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	> 100 °C (> 212 °F)
. Flash point:	Not applicable.
. Ignition temperature:	230 °C (446 °F)
. Auto igniting:	Product is not selfigniting.
. Danger of explosion:	Product does not present an explosion hazard.
. Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
. Density at 20 °C (68 °F):	1.278 g/cm ³ (10.665 lbs/gal)
. Solubility in / Miscibility with Water:	Fully miscible.
. Solvent content:	
Organic solvents:	5.2 %
Water:	>61 %
VOC content:	5.2 %
. 9.2 Other information	No further relevant information available.

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/vapors

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:** Sensitization possible through skin contact.
- . **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- . **Carcinogenic categories**

- . **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- . **NTP (National Toxicology Program)**

None of the ingredients is listed.

- . **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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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 2 (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.

13: Disposal considerations

- . **13.1 Waste treatment methods**
- . **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Rinse out concentrate residues with some of the water used for the solution and add to the solution in question.
Return the containers for recycling without concentrate residues. For further information on waste management techniques for photographic chemicals please contact the local environmental authorities.
- . **Uncleaned packagings:**
- . **Recommendation:** Disposal must be made according to official regulations.
- . **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14: Transport information

. 14.1 UN-Number	
. DOT, ADR, ADN, IMDG, IATA	Void
. 14.2 UN proper shipping name	
. DOT, ADR, ADN, IMDG, IATA	Void
. 14.3 Transport hazard class(es)	
. DOT, ADR, ADN, IMDG, IATA	
. Class	Void
. 14.4 Packing group	
. DOT, 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":	-

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15: Regulatory information

. **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
. Sara

. **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

. **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

. **TSCA (Toxic Substances Control Act):**

7732-18-5	water
21799-87-1	potassium 2,5-dihydroxybenzenesulphonate
584-08-7	potassium carbonate
111-46-6	diethylene glycol
298-14-6	potassium hydrogencarbonate
7758-02-3	potassium bromide
13047-13-7	4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one (HMP)
540-72-7	sodium thiocyanate
7681-11-0	potassium iodide

. **Proposition 65**

. **Chemicals known to cause cancer:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

. **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

. **Carcinogenicity categories**

. **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

. **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

. **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

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.

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

. **Contact:** e-mail: sida@tetenal.com

. **Date of preparation / last revision** 07/30/2014 / -

. **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)

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ICAO: International Civil Aviation Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

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

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

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1: Identification

- . **1.1 Product identifier**
- . **Trade name:** COLORTEC E-6 3-Bath Colour-Developer CD Part 1
- . **Article number:** 102031 Part 1, 102034 Part 1, 44275 CD P1
- . **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) 40 521 45-296
www.tetenal.com; E-mail: info@tetenal.com
- . **Information department:** Department environment and safety. E-Mail: info@tetenal.com
- . **1.4 Emergency telephone number:**
Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) identification

- . **2.1 Classification of the substance or mixture**
- . **Classification according to Regulation (EC) No 1272/2008**
WARNING MAY CAUSES SKIN AND EYE IRRITATION
Avoid contact with eyes and skin. Use eye protection, chemicalresistant gloves and skin protection. Wash thoroughly after handling. First aid: In case of contact, immediately flush eyes and skin with plenty of water for at least 15 minutes. Get medical attention. Remove material from skin and clothing.
Keep out of reach of children!



GHS05

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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



Irritant

Irritating to eyes and skin.

- . **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
- . **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- . **2.2 Label elements**

- . **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.

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Trade name: COLORTEC E-6 3-Bath Colour-Developer CD Part 1

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. Code letter and hazard designation of product:



Xi Irritant

. Risk phrases:

Irritating to eyes and skin.

. Safety phrases:

Keep out of the reach of children.

Do not empty into drains.

If swallowed, seek medical advice immediately and show this container or label.

. Classification system:

. NFPA ratings (scale 0 - 4)



Health = 1

Fire = 0

Reactivity = 0

. HMIS-ratings (scale 0 - 4)



Health = 1

Fire = 0

Reactivity = 0

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. **PBT:** Not applicable.

. **vPvB:** Not applicable.

3: Composition/information on ingredients

. 3.2 Chemical characterization: Mixtures

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

. Dangerous components:

CAS: 7778-53-2	Tripotassium orthophosphate	10-25%
CAS: 1310-73-2 Index number: 011-002-00-6 Reg.nr.: 01-2119457892-27	sodium hydroxide (caustic soda)	0.5-2%

4: First-aid measures

. 4.1 Description of first aid measures

. **General information:** Immediately remove any clothing soiled by the product.

. **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

. **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

. After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

. After swallowing:

Induce vomiting and call for medical help.

Rinse out mouth and then drink plenty of water.

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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.

5: Fire-fighting measures

. 5.1 Extinguishing media

. Suitable extinguishing agents:

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

. 5.2 Special hazards arising from the substance or mixture

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

. 5.3 Advice for firefighters

. Protective equipment: No special measures required.

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.

7: Handling and storage

. 7.1 Precautions for safe handling Prevent formation of aerosols.

. Information about protection against explosions and fires: No special measures required.

. 7.2 Conditions for safe storage, including any incompatibilities

. Storage:

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

. Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

Store away from oxidizing agents.

. Further information about storage conditions:

Keep receptacle 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

Protect from exposure to the light.

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

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8: Exposure controls/personal protection

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

. 8.1 Control parameters

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

1310-73-2 sodium hydroxide (caustic soda) (1- <2%)

PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Short-term value: C 2 mg/m ³
TLV (USA)	Short-term value: C 2 mg/m ³

. **Additional information:** The lists that were valid during the creation 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.

. **Breathing equipment:** 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

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Trade name: COLORTEC E-6 3-Bath Colour-Developer CD Part 1

. **Body protection:** Protective work clothing

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9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Fluid
Color:	Light yellow
Odor:	Recognizable

. pH-value at 20 °C (68 °F): >13

. Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C (> 212 °F)

. Flash point: Not applicable.

. Auto igniting: Product is not selfigniting.

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

. Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

. Density at 20 °C (68 °F): 1.157 g/cm³ (9.655 lbs/gal)

. Solubility in / Miscibility with

Water: Fully miscible.

. Solvent content:

Organic solvents:	0.0 %
Water:	>84 %

. 9.2 Other information: No further relevant information available.

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/vapors

11: Toxicological information

. 11.1 Information on toxicological effects

. Acute toxicity:

. LD/LC50 values that are relevant for classification:

1310-73-2 sodium hydroxide (caustic soda)

Oral	LD50	>2000 mg/kg (rat)
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. Primary irritant effect:

. on the skin: Irritant to skin and mucous membranes.

. on the eye: Irritating effect.

. Sensitization: No sensitizing effects known.

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. Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

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

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

. NTP (National Toxicology Program)

None of the ingredients is listed.

. OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

1310-73-2 sodium hydroxide (caustic soda)

EC50 24h: 76 mg/l (daphnia magna (Großer Wasserfloh))

LC50 48h: 99 mg/L (Lepomis macrochirus)

96h: 45.4 mg/L (Oncorhynchus mykiss)

. 12.2 Persistence and degradability No further relevant information available.

. 12.3 Bioaccumulative potential No further relevant information available.

. 12.4 Mobility in soil No further relevant information available.

. Additional ecological information:

. General notes:

Water hazard class 1 (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.

13: Disposal considerations

. 13.1 Waste treatment methods

. Recommendation:

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

. Uncleaned packagings:

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

. Recommended cleansing agent: Water, if necessary with cleansing agents.

USA

(Contd. on page 7)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-Bath Colour-Developer CD Part 1

(Contd. of page 6)

14: Transport information

. 14.1 UN-Number	
. DOT, ADR, ADN, IMDG, IATA	Void
. 14.2 UN proper shipping name	
. DOT, ADR, ADN, IMDG, IATA	Void
. 14.3 Transport hazard class(es)	
. DOT, ADR, ADN, IMDG, IATA	
. Class	Void
. 14.4 Packing group	
. DOT, 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":	-

15: Regulatory information

. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
. Sara

. Section 355 (extremely hazardous substances):

None of the ingredient is listed.

. Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

. TSCA (Toxic Substances Control Act):

7732-18-5	water
1310-73-2	sodium hydroxide (caustic soda)
99-11-6	citracinic acid
527-07-1	sodium gluconate
74-94-2	dimethylamine--borane (1:1)

. Proposition 65

. Chemicals known to cause cancer:

None of the ingredients is listed.

. Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

. Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

. Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

. Cancerogenity categories

. EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-Bath Colour-Developer CD Part 1

(Contd. of page 7)

. TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

. NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

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.

. Department issuing MSDS: Department product safety

. Contact: e-mail: sida@tetenal.com

. Date of preparation / last revision 07/30/2014 / -

. 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 Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

. * Data compared to the previous version altered.

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

1: Identification

- . **1.1 Product identifier**
- . **Trade name:** COLORTEC E-6 3-bath Colour Developer CD-Part 2
- . **Article number:** 102031 Part 2, 102034 Part 2, 44276 CD-P2
- . **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) 40 521 45-296
www.tetenal.com; E-mail: info@tetenal.com
- . **Information department:** Department environment and safety. E-Mail: info@tetenal.com
- . **1.4 Emergency telephone number:**
Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) 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. **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.



GHS09

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



GHS07

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

H401 Toxic to aquatic life.

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



Irritant

May cause sensitisation by skin contact.



Dangerous for the environment

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 labeled due to the calculation procedure of international guidelines.

- . **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 1)

. 2.2 Label elements

. Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

. Code letter and hazard designation of product:



Xi Irritant
N Dangerous for the environment

. Hazard-determining components of labeling:

p-Phenylendiaminderivat (CD-3)

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

. Risk phrases:

May cause sensitisation by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

. Safety phrases:

Keep out of the reach of children.

Avoid contact with skin.

Wear suitable gloves.

Avoid release to the environment. Refer to special instructions/safety data sheets.

. Classification system:

. NFPA ratings (scale 0 - 4)



Health = 1
Fire = 0
Reactivity = 0

. HMIS-ratings (scale 0 - 4)



Health = 1
Fire = 0
Reactivity = 0

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. PBT: Not applicable.

. vPvB: Not applicable.

3: Composition/information on ingredients

. 3.2 Chemical characterization: Mixtures

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

. Dangerous components:

CAS: 25646-71-3	p-Phenylendiaminderivat (CD-3)	5-10%
Index number: 612-134-00-2	N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)	

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 2)

4: First-aid measures

- . **4.1 Description of first aid measures**
 - . **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 minutes 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.

5: Fire-fighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
CO₂, extinguishing 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.

6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- . **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- . **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.

7: Handling and storage

- . **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- . **Information about protection against explosions and fires:** 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: 5-25 °C
Protect from exposure to the light.

(Contd. on page 4)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 3)

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

8: Exposure controls/personal protection

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

. 8.1 Control parameters

. Components 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 that were valid during the creation 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.

Avoid contact with the skin.

. Breathing equipment: 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: Safety glasses

. Body protection: Protective work clothing

9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Fluid

Color: Light yellow

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Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 4)

. Odor:	Pungent to sulfur dioxide
. pH-value at 20 °C (68 °F):	2
. Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C (> 212 °F)
. Flash point:	Not applicable.
. Auto igniting:	Product is not selfigniting.
. Danger of explosion:	Product does not present an explosion hazard.
. Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
. Density at 20 °C (68 °F):	1.039 g/cm ³ (8.67 lbs/gal)
. Solubility in / Miscibility with	
Water:	Fully miscible.
. Solvent content:	
Organic solvents:	0.0 %
Water:	>89 %
. 9.2 Other information	No further relevant information available.

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/vapors

11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity:**

. **LD/LC50 values that are relevant for classification:**

25646-71-3 p-Phenylendiaminderivat (CD-3)

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

Oral	LD50	931 mg/kg (rat)
------	------	-----------------

- . **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 preparation is "not irritant", because the puffer capacity (Young, How, Walker, Worth. Classification as Irritant of preparations containing acidic or alkaline substances without testing on animals. Toxicology in Vitro, 2, No. 1, pages 9-26, 1988,

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

(Contd. on page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 5)

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

. NTP (National Toxicology Program)

None of the ingredients is listed.

. OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

25646-71-3 p-Phenylendiaminderivat (CD-3)

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

LC50 | 96h: 1.8 mg/L (fat)

. 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

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Water hazard class 3 (Self-assessment): extremely hazardous for water

Danger to drinking water if even extremely 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.

13: Disposal considerations

. 13.1 Waste treatment methods

. Recommendation:

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

. Uncleaned packagings:

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

. Recommended cleansing agent: Water, if necessary with cleansing agents.

14: Transport information

. 14.1 UN-Number

. DOT

Void

(Contd. on page 7)

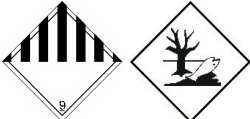
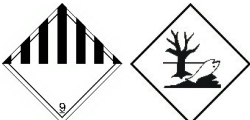
Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: **COLORTEC E-6 3-bath Colour Developer CD-Part 2**

(Contd. of page 6)

. ADR, IMDG, IATA	UN3082
. 14.2 UN proper shipping name	
. DOT	Void
. 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)	
. DOT	
. Class	Void
. 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	
. DOT	Void
. ADR, IMDG, IATA	III
. 14.5 Environmental hazards:	Product contains environmentally hazardous substances: p-Phenylenediamine derivate CD-3
. Marine pollutant:	Yes Symbol (fish and tree)
. 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.
. UN "Model Regulation":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

USA

(Contd. on page 8)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 7)

15: Regulatory information

. **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
. Sara

. **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

. **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

. **TSCA (Toxic Substances Control Act):**

7732-18-5 water

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

5244-34-8 2,2'-ethylenedithiodiethanol

7758-02-3 potassium bromide

7681-11-0 potassium iodide

. **Proposition 65**

. **Chemicals known to cause cancer:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

. **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

. **Carcinogenicity categories**

. **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

. **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

. **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

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.

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

. **Contact:** e-mail: sida@tetenal.com

. **Date of preparation / last revision** 07/30/2014 / -

. **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 Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-bath Colour Developer CD-Part 2

(Contd. of page 8)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

: Hazardous to the aquatic environment - AcuteHazard, Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

1: Identification

. 1.1 Product identifier

. Trade name: **COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath**

. Article number: 102031 BX-P1, 102034 BX-P1, 102226 BX-P1, 44020 BX-P1, 102228 BX-P1

. 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) 40 521 45-296

www.tetenal.com; E-mail: info@tetenal.com

. Information department: Department environment and safety. E-Mail: info@tetenal.com

. 1.4 Emergency telephone number:

Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) 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. 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 labeled due to the calculation procedure of international guidelines.

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

. Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from 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 according to directives on hazardous materials.

. Classification system:

. NFPA ratings (scale 0 - 4)



. HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

(Contd. on page 2)

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

(Contd. of page 1)

- . **2.3 Other hazards**
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.

3: Composition/information on ingredients

- . **3.2 Chemical characterization: Mixtures**
- . **Description:** Mixture of the substances listed below with nonhazardous additions.
- . **Dangerous components:** Void

. **Not hazardous components:**

21265-50-9	Ethylenediaminetetraacetic acid ferric ammonium salt/ Ferriammonium-complex	25-50%
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4: First-aid measures

- . **4.1 Description of first aid measures**
- . **General information:** Immediately remove any clothing 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.
- . **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.

5: Fire-fighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
CO2, extinguishing 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.

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.

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

(Contd. of page 2)

7: Handling and storage

- . **7.1 Precautions for safe handling** No special measures required.
- . **Information about protection against explosions and fires:** 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: 5-25 °C
- . **7.3 Specific end use(s)** No further relevant information available.

8: Exposure controls/personal protection

- . **Additional information about design of technical systems:** No further data; see item 7.
- . **8.1 Control parameters**
- . **Components 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 that were valid during the creation were used as basis.
- . **8.2 Exposure controls**
- . **Personal protective equipment:**
- . **General protective and hygienic measures:** Avoid contact with the skin.
- . **Breathing equipment:** 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Gove material	breakthroug-time	layer thickness
Butyl rubber:	>480 min	≥0,4mm
Nitrile rubber:	>480 min	≥0,38mm
Neoprene:	>240 min	≥0,65mm
- . **Eye protection:** Safety glasses
- . **Body protection:** Protective work clothing

USA

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

(Contd. of page 3)

9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Fluid
Color:	Dark red
Odor:	Odorless

. pH-value at 20 °C (68 °F): 6.8

. Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C (> 212 °F)

. Flash point: Not applicable.

. Auto igniting: Product is not selfigniting.

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

. Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

. Density at 20 °C (68 °F): 1.24 g/cm³ (10.348 lbs/gal)

. Solubility in / Miscibility with

Water: Fully miscible.

. Solvent content:

Organic solvents:	0.7 %
Water:	>59 %
VOC content:	0.7 %

. 9.2 Other information: No further relevant information available.

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/vapors

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 internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

(Contd. of page 4)

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

. NTP (National Toxicology Program)

None of the ingredients is listed.

. OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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 (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.

13: Disposal considerations

. 13.1 Waste treatment methods

. Recommendation:

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

. Uncleaned packagings:

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

. Recommended cleansing agent: Water, if necessary with cleansing agents.

14: Transport information

. 14.1 UN-Number

. DOT, ADR, ADN, IMDG, IATA Void

. 14.2 UN proper shipping name

. DOT, ADN, IMDG, IATA Void

. ADR Void

. 14.3 Transport hazard class(es)

. DOT, ADR, ADN, IMDG, IATA

. Class Void

. 14.4 Packing group

. DOT, ADR, IMDG, IATA Void

(Contd. on page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

(Contd. of page 5)

- . **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":** -

15: Regulatory information

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **Sara**

. **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

. **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

. **TSCA (Toxic Substances Control Act):**

7732-18-5 water

64-19-7 acetic acid

3179-31-5 1,2,4-triazole-3-thiol

. **Proposition 65**

. **Chemicals known to cause cancer:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

. **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

. **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

. **Carcinogenicity categories**

. **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

. **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

. **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

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

. **Date of preparation / last revision** 07/30/2014 / -

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Safety Data Sheet
acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3 Bad BX-Part 1 Bleachfixbath

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. 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 Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

. * Data compared to the previous version altered.

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

1: Identification

1.1 Product identifier

Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

Article number: 102031 BX-P2, 102034 BX-P2, 102226 BX-P2, 44021 BX-P2, 102228 BX P2

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) 40 521 45-296

www.tetenal.com; E-mail: info@tetenal.com

Information department: Department environment and safety. E-Mail: info@tetenal.com

1.4 Emergency telephone number:

Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) 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. **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 labeled due to the calculation procedure of international guidelines.

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

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from 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 according to directives on hazardous materials.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

(Contd. on page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

(Contd. of page 1)

- . **2.3 Other hazards**
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.

3: Composition/information on ingredients

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

. **Dangerous components:**

CAS: 7631-90-5 Index number: 016-064-00-8	sodium hydrogensulphite . . . %	3-5%
CAS: 64-19-7 Index number: 607-002-00-6 RTECS: AF 1225000 Reg.nr.: 01-2119475328-30	acetic acid	1- <2%

. **Not hazardous components:**

CAS: 7783-18-8 Reg.nr.: 01-2119537325-41	Ammonium thiosulphate	50-90%
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4: First-aid measures

- . **4.1 Description of first aid measures**
- . **General information:** No special measures required.
- . **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.
- . **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.

5: Fire-fighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents:**
CO₂, extinguishing 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.

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.

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Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

(Contd. of page 2)

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.

7: Handling and storage

. 7.1 Precautions for safe handling No special measures required.

. Information about protection against explosions and fires: 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: 5-25 °C

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

8: Exposure controls/personal protection

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

. 8.1 Control parameters

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

7631-90-5 sodium hydrogensulphite . . . % (3-5%)

REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Long-term value: 5 mg/m ³

64-19-7 acetic acid (1- <2%)

REL (USA)	Long-term value: 25 mg/m ³ , 10 ppm
REL (USA)	Short-term value: 37 mg/m ³ , 15 ppm
	Long-term value: 25 mg/m ³ , 10 ppm
TLV (USA)	Short-term value: 37 mg/m ³ , 15 ppm
	Long-term value: 25 mg/m ³ , 10 ppm
IOELV (EU)	Long-term value: 25 mg/m ³ , 10 ppm

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

. 8.2 Exposure controls

. Personal protective equipment:

. General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

. Breathing equipment: 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

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Safety Data Sheet acc. to OSHA HCS

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Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

(Contd. of page 3)

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

9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Fluid
Color:	Light yellow
. Odor:	Recognizable

. pH-value at 20 °C (68 °F): 5.4

. Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C (> 212 °F)

. Flash point: Not applicable.

. Auto igniting: Product is not selfigniting.

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

. Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

. Density at 20 °C (68 °F): 1.346 g/cm³ (11.232 lbs/gal)

. Solubility in / Miscibility with

Water: Fully miscible.

. Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

. Solvent content:

Organic solvents:	1.4 %
Water:	>40 %
VOC content:	1.4 %

. 9.2 Other information No further relevant information available.

USA

(Contd. on page 5)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

(Contd. of page 4)

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/vapors

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 internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- . **Carcinogenic categories**

- . **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- . **NTP (National Toxicology Program)**

None of the ingredients is listed.

- . **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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 (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.

USA

(Contd. on page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC C-41/ E-6 Negativ Kit BX Part 2

(Contd. of page 6)

. Proposition 65

. Chemicals known to cause cancer:

None of the ingredients is listed.

. Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

. Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

. Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

. Cancerogenity categories

. EPA (Environmental Protection Agency)

None of the ingredients is listed.

. TLV (Threshold Limit Value established by ACGIH)

7681-57-4 sodium metabisulphite (sodium disulphite)

A4

. NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

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

. Date of preparation / last revision 07/30/2014 / -

. 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 Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

. * Data compared to the previous version altered.

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

1: Identification

- . **1.1 Product identifier**
- . **Trade name:** COLORTEC E-6 3-Bath STAB Stabilizer
- . **Article number:** 102031 Stab, 102034 Stab, 45603 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) 40 521 45-296
www.tetenal.com; E-mail: info@tetenal.com
- . **Information department:** Department environment and safety. E-Mail: info@tetenal.com
- . **1.4 Emergency telephone number:**
Poison Information Centre Berlin/Germany: +49 (0) 30 - 30686 790 (English 24hours)

2: Hazard(s) identification

- . **2.1 Classification of the substance or mixture**
- . **Classification according to Regulation (EC) No 1272/2008**
DANGER! POSSIBLE CANCER HAZARD. MAY CAUSE CANCER BASED ON ANIMAL DATA. HARMFUL IF INHALED. CAUSES AND EYE IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY REACTION AND ALLERGIC SKIN REACTION.
Avoid breathing gas. Keep container closed. Use only with adequate ventilation. Avoid contact with skin, eye and clothing. Wash thoroughly after handling. Before using, read Material Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN. First Aid: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush skin with soap and skin/eyes with plenty of water for at least 15 minutes. Remove material from skin, clothing and shoes. Destroy contaminated shoes. Wash clothing before reuse. In every case get medical attention.



GHS08

Carc. 1A H350 May cause cancer.



GHS07

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

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



Harmful

Limited evidence of a carcinogenic effect.



Irritant

May cause sensitisation by skin contact.

- . **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
- . **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-Bath STAB Stabilizer

(Contd. of page 1)

. 2.2 Label elements

. Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

. Code letter and hazard designation of product:



Xn Harmful

. Hazard-determining components of labeling:

formaldehyde

. Risk phrases:

Limited evidence of a carcinogenic effect.
May cause sensitisation by skin contact.

. Safety phrases:

Keep out of the reach of children.
Do not empty into drains.
Wear suitable protective clothing and gloves.
If swallowed, seek medical advice immediately and show this container or label.

. Classification system:

. NFPA ratings (scale 0 - 4)



Health = 2
Fire = 0
Reactivity = 0

. HMIS-ratings (scale 0 - 4)



Health = 2
Fire = 0
Reactivity = 0

. 2.3 Other hazards

. Results of PBT and vPvB assessment

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

3: Composition/information on ingredients

. 3.2 Chemical characterization: Mixtures

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

. Dangerous components:

CAS: 50-00-0 Index number: 605-001-00-5 RTECS: LP 8925000 Reg.nr.: 01-2119488953-20	formaldehyde	2%
CAS: 68131-39-5	Alcohol ethoxylate	<1%

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/30/2014

Reviewed on 07/30/2014

Trade name: COLORTEC E-6 3-Bath STAB Stabilizer

(Contd. of page 2)

4: First-aid measures

. 4.1 Description of first aid measures

. 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.

. After swallowing:

If symptoms persist consult doctor.

Induce vomiting, only if affected person is fully conscious.

. 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.

5: Fire-fighting measures

. 5.1 Extinguishing media

. Suitable extinguishing agents:

CO₂, extinguishing 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.

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).

Dispose contaminated material as waste according to item 13.

. 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.

7: Handling and storage

. 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

. Information about protection against explosions and fires:

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.

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.

8: Exposure controls/personal protection

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

. 8.1 Control parameters

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

50-00-0 formaldehyde (1- <3%)

PEL (USA)	Short-term value: 2 ppm Long-term value: 0.75 ppm see 29 CFR 1910.1048(c)
REL (USA)	Short-term value: C 0.1* ppm Long-term value: 0.016 ppm *15-min; See Pocket Guide App. A
TLV (USA)	Short-term value: C 0.37 mg/m ³ , C 0.3 ppm SEN

. **Additional information:** The lists that were valid during the creation 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.

. **Breathing equipment:** 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.

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. Eye protection:



Tightly sealed goggles

Safety glasses

. Body protection: Protective work clothing

9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Fluid
Color:	Colorless
. Odor:	Recognizable

. pH-value at 20 °C (68 °F): 4.8

. Change in condition

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	Undetermined.

. Flash point: Not applicable.

. Auto igniting: Product is not selfigniting.

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

. Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

. Density at 20 °C (68 °F): 1.002 g/cm³ (8.362 lbs/gal)

. Solubility in / Miscibility with

Water: Fully miscible.

. Solvent content:

Organic solvents:	2.8 %
Water:	>96 %
VOC content:	2.8 %

. 9.2 Other information No further relevant information available.

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/vapors

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11: Toxicological information

. 11.1 Information on toxicological effects

. Acute toxicity:

. LD/LC50 values that are relevant for classification:

50-00-0 formaldehyde

Oral	LD50	100 mg/kg (rat)
Dermal	LD50	270 mg/kg (rabbit)
Inhalative	LC50	0.57 mg/L (rat)

. 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 internally approved calculation methods for preparations:

Irritant

Harmful

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

50-00-0	formaldehyde	1
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. NTP (National Toxicology Program)

50-00-0	formaldehyde	R
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. OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

50-00-0 formaldehyde

EC50	96h: 24 mg/l (daphnia magna (Großer Wasserfloh))
LC50	96h: 24 mg/L (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.

. Additional ecological information:

. General notes:

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 1 (Self-assessment): slightly hazardous for water

. 12.5 Results of PBT and vPvB assessment

. PBT: Not applicable.

. vPvB: Not applicable.

. 12.6 Other adverse effects No further relevant information available.

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13: Disposal considerations

- . **13.1 Waste treatment methods**
- . **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packagings:**
- . **Recommendation:** Disposal must be made according to official regulations.
- . **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14: Transport information

. 14.1 UN-Number	
. DOT, ADR, ADN, IMDG, IATA	Void
. 14.2 UN proper shipping name	
. DOT, ADN, IMDG, IATA	Void
. ADR	Void
. 14.3 Transport hazard class(es)	
. DOT, ADR, ADN, IMDG, IATA	
. Class	Void
. 14.4 Packing group	
. DOT, 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":	-

15: Regulatory information

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . Sara

. **Section 355 (extremely hazardous substances):**

50-00-0	formaldehyde
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. **Section 313 (Specific toxic chemical listings):**

50-00-0	formaldehyde
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. **TSCA (Toxic Substances Control Act):**

7732-18-5	water
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50-00-0	formaldehyde
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64-17-5	ethanol
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. **Proposition 65**

. **Chemicals known to cause cancer:**

50-00-0	formaldehyde
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. Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

. Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

. Chemicals known to cause developmental toxicity:

64-17-5 ethanol

. Cancerogenity categories

. EPA (Environmental Protection Agency)

None of the ingredients is listed.

. TLV (Threshold Limit Value established by ACGIH)

64-17-5 ethanol

A4

. NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

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.

. Department issuing MSDS: Department product safety

. Contact: e-mail: sida@tetenal.com

. Date of preparation / last revision 07/30/2014 / -

. 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 Organization

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Carc. 1A: Carcinogenicity, Hazard Category 1A

. * Data compared to the previous version altered.

USA