

20.05.2010

### Kit Components

Product code	Description
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<b>106402</b>	<b>Blutoner for 1L</b>
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Components:

106402 Part1	BLAUTONER Part 1 0,15L
106402 Part2	BLAUTONER Part 2 0,15L
106402 Part3	BLAUTONER Part 3 0,15L

## Safety Data Sheet

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

Printing date 20.05.2010

version no: 1

Revision: 20.05.2010

### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** Bluetoner Part 1

- **Article number:** 106402 Part1, 5122/7 Part1, 44302

- **Application of the substance / the preparation** Toner for photograph materials

- **Manufacturer/Supplier:**

TETENAL AG &amp; CO. KG

Schützenwall 31-35

D-22844 Norderstedt / Germany

Tel.: +49 040 521 45-0

Fax: +49 040-52145-296

www.tetenal.com

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TETENAL LTD., Unit 1, Foxholes Road

Leicester LE3 1TH / Great Britain

Tel.: +44 0870 460 8996 Fax: +44 0870 460 8997, e.mail: uk@tetenal.com, www.tetenal.co.uk

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

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

### 2 Hazards identification

- **Hazard description:** Not applicable.

- **Information concerning particular hazards for human and environment:**

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

- **Classification system:**

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

- **GHS label elements**

Safety data sheet available on request.

### 3 Composition/information on ingredients

- **Chemical characterization**

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

- **Dangerous components:**

CAS: 13746-66-2	Potassium ferricyanide	 Xn; R 21/22	1-5%
EINECS: 237-323-3		Warning:  3.1.O/4, 3.1.D/4	

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

### 4 First aid measures

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

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

- **After eye contact:** Rinse opened eye for several (15 min) under running water.

- **After swallowing:** If symptoms persist consult doctor.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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**Trade name: Bluetoner Part 1**

- **Protective equipment:** No special measures required.

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### 6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Pick up mechanically.
- **Additional information:** No dangerous substances are released.

### 7 Handling and storage

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

### 8 Exposure controls/personal protection

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

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

**13746-66-2 Potassium ferricyanide (1-5%)**

WEL	Long-term value: 5 mg/m <sup>3</sup> as CN; Sk
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- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Ensure adequate ventilation
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
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

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**Trade name: Bluetoner Part 1**

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Neoprene gloves

- **Penetration time of glove material**

Glove material: Butyl rubber with breakthrough-time:  $\geq 480$  min, layer thickness:  $\geq 0,4$  mmGloves made of nitrile rubber with layer thickness  $> 0,38$  mm and breakthrough-time  $> 480$  minGlove material: Neopren with breakthrough time:  $> 240$  min, layer thickness:  $> 0,65$  mm

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

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Odourless

- **Change in condition**

Melting point/Melting range:  $0^{\circ}\text{C}$ Boiling point/Boiling range:  $> 100^{\circ}\text{C}$ 

- **Flash point:** Not applicable.

- **Self-igniting:** Product is not selfigniting.

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

- **Vapour pressure at  $20^{\circ}\text{C}$ :** 23 hPa

- **Density at  $20^{\circ}\text{C}$ :** 1 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Fully miscible.

- **pH-value at  $20^{\circ}\text{C}$ :** 6.3

- **Solvent content:**

Organic solvents: 0.0 %

Water: 96.7 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** No dangerous reactions known.

- **Dangerous decomposition products:** Carbon monoxide and carbon dioxide

## 11 Toxicological information

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

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**Trade name: Bluetoner Part 1**

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· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

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

### 12 Ecological information

· **Additional ecological information:**

· **General notes:**

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

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

### 13 Disposal considerations

· **Product:**

· **Recommendation**

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

· **European waste catalogue**

09 01 99	wastes not otherwise specified
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· **Uncleaned packaging:**

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

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

### 14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **UN "Model Regulation":** -

### 15 Regulatory information

· **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

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

· **Special labelling of certain preparations:**

Safety data sheet available for professional user on request.

### 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.

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**Trade name: Bluetoner Part 1**

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**· Relevant R-phrases**

21/22 Harmful in contact with skin and if swallowed.

**· Department issuing MSDS:** Department product safety**· Contact:** e-mail: sida@tetenal.com**· Abbreviations and acronyms:**

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

GB

## Safety Data Sheet

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

Printing date 20.05.2010

version no: 1

Revision: 20.05.2010

### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** BLAUTONER Part 2 0,15L

- **Article number:** 106402 Part2, 44303, 5122/7 Part 2

- **Application of the substance / the preparation** Toner for photograph materials

- **Manufacturer/Supplier:**

TETENAL AG &amp; CO. KG

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

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

### 2 Hazards identification

- **Hazard description:** Not applicable.

- **Information concerning particular hazards for human and environment:**

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

- **Classification system:**

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

- **GHS label elements** Void

### 3 Composition/information on ingredients

- **Chemical characterization**

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

- **Dangerous components:**

CAS: 10138-04-2

Ammoniumeisen-(III)-bisulfat

5-10%

EINECS: 233-382-4

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

### 4 First aid measures

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

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

- **After eye contact:** Rinse opened eye for several (15 min) under running water.

- **After swallowing:** If symptoms persist consult doctor.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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**Trade name: BLAUTONER Part 2 0,15L**

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- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Pick up mechanically.
- **Additional information:** No dangerous substances are released.

### 7 Handling and storage

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

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - The usual precautionary measures are to be adhered to when handling chemicals.
  - Avoid contact with the eyes and skin.
- **Respiratory protection:** Ensure adequate ventilation
- **Protection of hands:**
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - 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

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Trade name: BLAUTONER Part 2 0,15L

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- **Penetration time of glove material**

Glove material: Butyl rubber with breakthrough-time:  $\geq 480$  min, layer thickness:  $\geq 0,4$  mm

Gloves made of nitrile rubber with layer thickness  $>0,38$ mm and breakthrough-time  $>480$ min

Glove material: Neopren with breakthrough time:  $>240$  min, layer thickness:  $>0,65$  mm

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

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Odourless

- **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:**  $> 100^{\circ}\text{C}$

- **Flash point:** Not applicable.

- **Self-igniting:** Product is not selfigniting.

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

- **Vapour pressure at  $20^{\circ}\text{C}$ :** 23 hPa

- **Density at  $20^{\circ}\text{C}$ :** 1.033 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Fully miscible.

- **pH-value at  $20^{\circ}\text{C}$ :** 2

- **Solvent content:**

**Organic solvents:** 0.0 %

**Water:** 93.2 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** No dangerous reactions known.

- **Dangerous decomposition products:** Irritant gases/vapours

## 11 Toxicological information

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

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## Safety Data Sheet

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

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**Trade name: BLAUTONER Part 2 0,15L**

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· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

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

### 12 Ecological information

· **Additional ecological information:**

· **General notes:**

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

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

### 13 Disposal considerations

· **Product:**

· **Recommendation**

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

· **European waste catalogue**

09 01 99	wastes not otherwise specified
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· **Uncleaned packaging:**

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

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

### 14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **UN "Model Regulation":** -

### 15 Regulatory information

· **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

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

### 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

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**Trade name: BLAUTONER Part 2 0,15L**

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**· Abbreviations and acronyms:**

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

GB

# Safety Data Sheet

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

Printing date 20.05.2010

version no: 1

Revision: 20.05.2010

### 1 Identification of the substance/preparation and of the company/undertaking

**· Product details****· Trade name: Bluetoner Part 3****· Article number:** 106402 Part3, 44304, 5122/7Part3**· Application of the substance / the preparation** Toner for photograph materials**· Manufacturer/Supplier:**

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**· Further information obtainable from:** Department environment and safety. E-mail: info@tetenal.com**· Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

### 2 Hazards identification

**· Hazard description:**

Xi Irritant

**· Information concerning particular hazards for human and environment:**

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

R 43 May cause sensitisation by skin contact.

**· Classification system:**

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

**· GHS label elements**

Warning

H317 - May cause an allergic skin reaction.

**· Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

**· Response:**

P321 Specific treatment (see on this label).

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

P363 Wash contaminated clothing before reuse.

**· Disposal:**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

**· Chemical characterization****· Description:** Mixture of substances listed below with nonhazardous additions.

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**Trade name: Bluetoner Part 3**

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**· Dangerous components:**

CAS: 144-62-7 EINECS: 205-634-3	oxalic acid Xn; R 21/22 Warning: 3.1.O/4, 3.1.D/4	1-5%
CAS: 55965-84-9	Isothiazolone (mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) T, C, N; R 23/24/25-34-43-50/53 Danger: 3.1.O/3, 3.1.D/3, 3.1.I/3; 3.2/IB Warning: 4.1.A/1, 4.1.C/1; 3.4.S/1	<0.06%

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

#### 4 First aid measures

- **General information:** Immediately remove any clothing/shoes soiled by the product.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

#### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** No special measures required.

#### 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation
- **Measures for environmental protection:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Pick up mechanically.  
Ensure adequate ventilation.

#### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.

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Trade name: **Bluetoner Part 3**

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

· **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 alkalis (caustic solutions).

Store away from oxidizing agents.

· **Further information about storage conditions:**

Protect from heat and direct sunlight.

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

Recommended storage temperature: 5-25°C

## 8 Exposure controls/personal protection

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

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

**144-62-7 oxalic acid (1-5%)**

WEL	Short-term value: 2 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>

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

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure

use self-contained respiratory protective device.

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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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: Butyl rubber with breakthrough-time:  $\geq 480$  min, layer thickness:  $\geq 0,4$  mm

Gloves made of nitrile rubber with layer thickness  $> 0,38$ mm and breakthrough-time  $> 480$ min

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**Trade name: Bluetoner Part 3**

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Glove material: Neopren with breakthrough time: >240 min, layer thickness: >0,65 mm  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Odourless

- **Change in condition**

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

- **Flash point:** Not applicable.

- **Self-igniting:** Product is not selfigniting.

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

- **Vapour pressure at 20°C:** 23 hPa

- **Density at 20°C:** 1.05 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Fully miscible.

- **pH-value at 20°C:** 2.6

- **Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	89.4 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.

- **Dangerous decomposition products:** Irritant gases/vapours

## 11 Toxicological information

- **Acute toxicity:**

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

**144-62-7 oxalic acid**

Oral	LD50	375 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** No irritant effect.

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## Safety Data Sheet

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

Printing date 20.05.2010

version no: 1

Revision: 20.05.2010

**Trade name: Bluetoner Part 3**

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- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- **Sensitisation** May cause sensitisation by skin contact.

### 12 Ecological information

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

### 13 Disposal considerations

- **Product:**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

09 01 99	wastes not otherwise specified
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -

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

### 15 Regulatory information

- **Labelling according to EU guidelines:**

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

- **Code letter and hazard designation of product:**



Xi Irritant

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**· Hazard-determining components of labelling:**

Isothiazolone (mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)

**· Risk phrases:**

43 May cause sensitisation by skin contact.

**· Safety phrases:**

2 Keep out of the reach of children.

24 Avoid contact with skin.

37 Wear suitable gloves.

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

29 Do not empty into drains.

### 16 Other information

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

**· Relevant R-phrases**

21/22 Harmful in contact with skin and if swallowed.

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

43 May cause sensitisation by skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**· Department issuing MSDS:** Department product safety

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

**· Abbreviations and acronyms:**

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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