

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.04.2011

version no: 1

Revision: 29.04.2011

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

- **Product identifier**
- **Trade name:** Superfix odourless 1L conc.
- **Article number:** 103067, 45575, 2130/1
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Fixing bath for photographic use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
TETENAL AG & CO. KG  
Schützenwall 31-35  
D-22844 Norderstedt / Germany  
Tel.: +49 040 521 45-0  
Fax: +49 040-52145-296  
www.tetenal.com  
E-mail: info@tetenal.com
- 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
- **Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Special labelling of certain preparations:**  
Safety data sheet available for professional user on request.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

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**· Dangerous components:**

CAS: 7631-90-5 EINECS: 231-548-0	sodium hydrogensulphite . . . %  Xn R22 R31 	1-5%
CAS: 1303-96-4 EINECS: 215-540-4	BORAX; Disodium tetraborate, decahydrate (waterfree CAS 1330-43-4)  T R60-61 	2-4%

**· SVHC**

1303-96-4 | BORAX; Disodium tetraborate, decahydrate (waterfree CAS 1330-43-4)

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

#### 4 First aid measures

**· Description of first aid measures****· General information:**

Immediately remove any clothing/shoes soiled by the product.

Take affected persons out into the fresh air.

**· After inhalation:** Supply fresh air.**· After skin contact:** Immediately rinse with water.**· After eye contact:** Rinse opened eye for several (15 min) under running water.**· After swallowing:** If symptoms persist consult doctor.**· Information for doctor:****· Most important symptoms and effects, both acute and delayed** No further relevant information available.**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

#### 5 Firefighting measures

**· Extinguishing media****· Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**· Special hazards arising from the substance or mixture** No further relevant information available.**· Advice for firefighters****· Protective equipment:** No special measures required.

#### 6 Accidental release measures

**· Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation**· Environmental precautions:**

Dilute with plenty of water.

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

**· Methods and material for containment and cleaning up:**

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

**· Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** Protect from heat.
- **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
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

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

<b>Ingredients with limit values that require monitoring at the workplace:</b>
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<b>7631-90-5 sodium hydrogensulphite . . . % (1-5%)</b>
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WEL () Long-term value: 5 mg/m <sup>3</sup>
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- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - The usual precautionary measures are to be adhered to when handling chemicals.
  - Avoid contact with the eyes and skin.
- **Respiratory protection:**
  - Not required.
  - Ensure adequate ventilation
- **Protection of hands:**
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - 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
  - 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

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· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

· <b>Form:</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Odourless
· <b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20°C:</b>	6.5
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#### · Change in condition

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

· <b>Flash point:</b>	Not applicable.
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#### · Ignition temperature:

· <b>Decomposition temperature:</b>	Not determined.
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· <b>Self-igniting:</b>	Product is not selfigniting.
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· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
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#### · Explosion limits:

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· <b>Vapour pressure at 20°C:</b>	23 hPa
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· <b>Density at 20°C:</b>	1.316 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

#### · Solubility in / Miscibility with water:

Fully miscible.

· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
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#### · Viscosity:

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

#### · Solvent content:

· <b>Organic solvents:</b>	0.2 %
· <b>Water:</b>	47.0 %

· <b>Other information</b>	No further relevant information available.
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## 10 Stability and reactivity

### · Reactivity

### · Chemical stability

· <b>Thermal decomposition / conditions to be avoided:</b>	Stable at environment temperature.
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· <b>Possibility of hazardous reactions</b>	No dangerous reactions known.
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· <b>Conditions to avoid</b>	No further relevant information available.
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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

### 11 Toxicological information

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

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

**1303-96-4 BORAX; Disodium tetraborate, decahydrate (waterfree CAS 1330-43-4)**

Oral LD50 4500-6000 mg/kg (rat)

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

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

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

### 12 Ecological information

- **Toxicity**

- **Acquatic toxicity:**

**1303-96-4 BORAX; Disodium tetraborate, decahydrate (waterfree CAS 1330-43-4)**

EC50 48h: 1085-1400 mg/l (daphnia magna)  
96h: 158 mg/l (sce)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

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

- **European waste catalogue**

09 01 04\* fixer solutions

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

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

### 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":** -
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

### 15 Regulatory information

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

- **Relevant phrases**

H302 Harmful if swallowed.  
H360FD May damage fertility. May damage the unborn child.  
R22 Harmful if swallowed.  
R31 Contact with acids liberates toxic gas.  
R60 May impair fertility.  
R61 May cause harm to the unborn child.

- **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