

## Safety data sheet

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

Printing date 25.02.2016




version no: 2

Revision: 25.02.2016

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

- . 1.1 Product identifier**
- . Trade name:** MIRASOL 2000 Antistatic
- . Article number:** 101080
- . 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** Wetting agent for photographic use
- . 1.3 Details of the supplier of the safety data sheet**
- . Manufacturer/Supplier:**  
TETENAL Europe GmbH  
Schützenwall 31-35  
D-22844 Norderstedt / Germany  
Phone: +49 (0) 40 521 45-0; Fax: +49 (0) 40-52145-296  
www.tetenal.com; E-Mail: info@tetenal.com
- TETENAL Ltd.,  
2 Meridian West, Meridian Business Park, Leicester LE19 1WX  
Phone: 0116 - 289 3644; E-Mail: uk@tetenal.com; www.tetenaluk.com
- . Further information obtainable from:** Department environment and safety. E-Mail: info@tetenal.com
- . 1.4 Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

#### SECTION 2: Hazards identification

- . 2.1 Classification of the substance or mixture**
- . Classification according to Regulation (EC) No 1272/2008**
-  GHS07
- Eye Irrit. 2 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**
-  Xi; Sensitising
- R43: May cause sensitisation by skin contact.
- . Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- . Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- 
- . 2.2 Label elements**
- . Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- . Hazard pictograms**
-  GHS07
- . Signal word** Warning

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

reaction mass 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)

**. Hazard statements**

H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.

**. Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves / eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**. 2.3 Other hazards****. Results of PBT and vPvB assessment**

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

## SECTION 3: Composition/information on ingredients

**. 3.2 Chemical characterisation: Mixtures**

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

**. Dangerous components:**

Polymer	Isotridecanelethoxylat ☒ Xn R22; ☒ Xi R41 ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	1-5%
CAS: 117272-76-1 Polymer	Polydimethylsiloxan ☒ Xn R22; ☒ Xi R36/38 ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%
CAS: 55965-84-9 EC number: 611-341-5 Index number: 613-167-00-5	reaction mass 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 R23/24/25; ☠ C R34; ☒ Xi R43; ☠ N R50/53 ☠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ☠ Met. Corr. 1, H290; Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Skin Sens. 1, H317	<0.06%

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

## SECTION 4: First aid measures

**. 4.1 Description of first aid measures**

. **After inhalation:** Supply fresh air and to be sure call for a doctor.  
. **After skin contact:** Immediately wash with water and soap and rinse thoroughly.  
. **After eye contact:** Rinse opened eye for several (15 min) under running water.  
. **After swallowing:**

Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.

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

No further relevant information available.

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

### SECTION 5: Firefighting measures

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

### SECTION 6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- . **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- . **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- . **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling** Prevent formation of aerosols.
- . **Information about fire - and explosion protection:** The product is not flammable.
- . **7.2 Conditions for safe storage, including any incompatibilities**
- . **Storage:**
- . **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- . **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with oxidising and acidic materials as well as heavy-metal compounds.
- . **Further information about storage conditions:**  
Store under lock and key and out of the reach of children.  
Recommended storage temperature: 5-30 °C
- . **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- . **Additional information about design of technical facilities:** No further data; see item 7.
- . **8.1 Control parameters**
- . **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- . **Additional information:** The lists valid during the making were used as basis.

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### . 8.2 Exposure controls

#### . Personal protective equipment:

#### . General protective and hygienic measures:

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

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

#### . Respiratory protection: Ensure adequate ventilation

#### . Protection of hands:



Protective gloves

Impervious gloves

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

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

#### . Material of gloves

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

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

Safety glasses

#### . Body protection: Protective work clothing

## SECTION 9: Physical and chemical properties

### . 9.1 Information on basic physical and chemical properties

#### . General Information

#### . Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

. pH-value at 20 °C: ~8

#### . Change in condition

Melting point/Melting range: 0 °C

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<b>Boiling point/Boiling range:</b>	> 100 °C
<b>Flash point:</b>	Not applicable.
<b>Self-igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Vapour pressure at 20 °C:</b>	23 hPa
<b>Density at 20 °C:</b>	~1 g/cm <sup>3</sup>
<b>Solubility in / Miscibility with water:</b>	Fully miscible.
<b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	>96 %
<b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- . **10.1 Reactivity** No further relevant information available.
- . **10.2 Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:** Irritant gases/vapours

### SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity** Based on available data, the classification criteria are not met.

#### . LD/LC50 values relevant for classification:

<b>Isotridecanoethoxylat</b>		
Oral	LD50	<2000 mg/kg (rat)
<b>117272-76-1 Polydimethylsiloxan</b>		
Oral	LD50	1533 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
<b>55965-84-9 reaction mass 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)</b>		
Oral	LD50	457 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

- . **Primary irritant effect:**
- . **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- . **Serious eye damage/irritation**  
Causes serious eye irritation.
- . **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.

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- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### . 12.1 Toxicity

##### . Aquatic toxicity:

##### Isotridecanolethoxylat

LC50 96h: 10-100 mg/l (Leuciscus leuciscus (Karpfenfisch))

**55965-84-9 reaction mass 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)**

EC50 48h: 0.1 mg/l (daphnia magna (Water flea))

96h: 0.22 mg/l (rbf)

- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.

##### . Additional ecological information:

##### . General notes:

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

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

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

##### . 12.5 Results of PBT and vPvB assessment

. **PBT:** Not applicable.

. **vPvB:** Not applicable.

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

### SECTION 13: Disposal considerations

#### . 13.1 Waste treatment methods

##### . Recommendation

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

##### . European waste catalogue

09 01 99 wastes not otherwise specified

##### . Uncleaned packaging:

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

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

### SECTION 14: Transport information

#### . 14.1 UN-Number

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

#### . 14.2 UN proper shipping name

. **ADR** Void

. **ADN, IMDG, IATA** Void

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<b>. 14.3 Transport hazard class(es)</b>	
<b>. ADR, ADN, IMDG, IATA</b>	
<b>. Class</b>	Void
<b>. 14.4 Packing group</b>	
<b>. ADR, IMDG, IATA</b>	Void
<b>. 14.5 Environmental hazards:</b>	
<b>. Marine pollutant:</b>	No
<b>. 14.6 Special precautions for user</b>	Not applicable.
<b>. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
<b>. UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

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

**. National regulations:**

**. Regulation (EC) No 648/2004 on detergents / Labelling for contents**

non-ionic surfactants

< 5%

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

### SECTION 16: Other information

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

**. Relevant phrases**

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R36/38	Irritating to eyes and skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

**. Abbreviations and acronyms:**

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

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ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

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

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

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

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

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

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

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

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