

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.06.2014

version no: 1

Revision: 26.06.2014

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

1.1 Product identifier

Trade name: **ALGENEX PLUS**

Article number: 104584

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

Biocide To prevent algae growth

Algicide To prevent algae growth

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



GHS05

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS07

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

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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



C; Corrosive

R34: Causes burns.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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. Hazard pictograms

GHS05

GHS07

. Signal word Danger**. 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) (Isothiazolone)

. Hazard statements

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H412 Harmful to aquatic life with long lasting effects.

. Precautionary statements

P264 Wash thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P501 Dispose of contents/container in accordance with local regulations.

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

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

SECTION 3: Composition/information on ingredients

. 3.1 Chemical characterization: Substances**. CAS No. Description**

7732-18-5 water, distilled, conductivity or of similar purity

. Identification number(s)

. **EC number:** 231-791-2

. 3.2 Chemical characterization: Mixtures

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

. Dangerous components:

CAS: 55965-84-9 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) (Isothiazolone) ☠ T R23/24/25; ☠ C R34; ☠ Xi R43; ☠ N R50/53 ☠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Skin Sens. 1, H317	~1.5%
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SECTION 4: First aid measures

. 4.1 Description of first aid measures

. General information:

Immediately remove any clothing/shoes soiled by the product.

Take affected persons out into the fresh air.

. 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. Then consult a doctor.

. After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Do not induce vomiting; call for medical help immediately.

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

. Information for doctor:

Links for hazardous substances data GESTIS: <http://www.dguv.de/ifa/de/gestis/stoffdb/index.jsp>

. 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

SECTION 5: Firefighting measures

. 5.1 Extinguishing media

. Suitable extinguishing agents:

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

. 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Sulphur dioxide (SO₂)

Hydrogen chloride (HCl)

. 5.3 Advice for firefighters

. Protective equipment: Wear self-contained respiratory protective device.

. Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

. 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

. 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

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

. 6.3 Methods and material for containment and cleaning up:

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

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

neutraliser with Sodiumbisulfite solution

. 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

. 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

. Information about fire - and explosion protection: No special measures required.**. 7.2 Conditions for safe storage, including any incompatibilities****. Storage:****. Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Store only in the original receptacle.

. Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from metals.

Do not store together with alkalis (caustic solutions).

. Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

Recommended storage temperature: 5-25 °C

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

SECTION 8: Exposure controls/personal protection

. Additional information about design of technical facilities: No further data; see item 7.**. 8.1 Control parameters****. Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

. Additional information: The lists valid during the making were used as basis.**. 8.2 Exposure controls****. Personal protective equipment:****. General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Use skin protection cream for skin protection.

Avoid contact with the eyes and skin.

. Respiratory protection:

Not necessary if room is well-ventilated.

Filter A/P2 Filter against organic gases and vapors with boiling point > 65 °C and liquid particles against gesundheitsschädlicher Stoffe

. Protection of hands:

Protective gloves

Impervious gloves

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

Only use chemical-protective gloves with CE-labelling of category III.

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Acid resistant gloves

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.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

. Penetration time of glove material

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

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

. Eye protection:



Tightly sealed goggles

. Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Fluid
Colour:	Light blue
Odour:	Recognizable

. pH-value at 20 °C: 1.8 -2.6

. Change in condition

Melting point/Melting range: 0 °C

Boiling point/Boiling range: > 100 °C

. Flash point: Not applicable.

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

. Vapour pressure at 20 °C: 23 hPa

. Density at 20 °C: 1.022-1.032 g/l

. Solubility in / Miscibility with

water: Fully miscible.

. Solvent content:

Organic solvents: 0.0 %

Water: >98

. 9.2 Other information No further relevant information available.

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SECTION 10: Stability and reactivity

- . **10.1 Reactivity**
- . **10.2 Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **10.3 Possibility of hazardous reactions**
 - Corrosive action on metals.
 - Reacts with amines.
 - Violent reactions with strong alkalis and oxidizing agents.
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:** Irritant gases/vapours

SECTION 11: Toxicological information

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

. LD/LC50 values relevant for classification:

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) (Isothiazolone)

Oral	LD50	457 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

- . **Primary irritant effect:**
- . **on the skin:** Caustic effect on skin and mucous membranes.
- . **on the eye:** Strong caustic effect.
- . **Sensitization:** Sensitization possible through skin contact.
- . **Additional toxicological information:**
 - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

SECTION 12: Ecological information

- . **12.1 Toxicity**

. Aquatic toxicity:

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) (Isothiazolone)

EC50	48h: 8 mg/l (daphnia magna (Großer Wasserfloh))
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- . **12.2 Persistence and degradability** No further relevant information available.
- . **Other information:** The product is biodegradable.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Remark:** Harmful to fish
- . **Additional ecological information:**
- . **General notes:**
 - Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
 - Must not reach sewage water or drainage ditch undiluted or unneutralized.
 - Danger to drinking water if even extremely small quantities leak into the ground.
 - Harmful to aquatic organisms
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.

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- . **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**

16 03 05	organic wastes containing dangerous substances
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- . **Uncleaned packaging:**
- . **Recommendation:** Disposal must be made according to official regulations.
- . **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> . 14.1 UN-Number . ADR, IMDG, IATA | 1903 |
| <ul style="list-style-type: none"> . 14.2 UN proper shipping name . ADR . IMDG, IATA | 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(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) mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-m)
DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(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) mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-m) |
| <ul style="list-style-type: none"> . 14.3 Transport hazard class(es) . ADR <div style="text-align: center;">  </div> <ul style="list-style-type: none"> . Class . Label | 8 (C9) Corrosive substances.
8 |
| <ul style="list-style-type: none"> . IMDG, IATA <div style="text-align: center;">  </div> <ul style="list-style-type: none"> . Class . Label | 8 Corrosive substances.
8 |
| <ul style="list-style-type: none"> . 14.4 Packing group . ADR, IMDG, IATA | III |

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. 14.5 Environmental hazards:	
. Marine pollutant:	No
. 14.6 Special precautions for user	Warning: Corrosive substances.
. Danger code (Kemler):	80
. EMS Number:	F-A,S-B
. 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
	Not applicable.
. Transport/Additional information:	
. ADR	
. Limited quantities (LQ)	LQ7
. Transport category	2
. Tunnel restriction code	E
. UN "Model Regulation":	UN1903; DISINFECTANT, LIQUID, CORROSIVE, N.O.S.; 8; III

SECTION 15: Regulatory information

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

SECTION 16: Other information

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

. Relevant phrases

- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H331 Toxic if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

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)

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

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Acute Tox. 3: Acute toxicity, Hazard Category 3

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

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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

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

. * Data compared to the previous version altered.

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