

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 26.09.2008

version no: 1

Revision: 30.04.2008

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

· **Product details**

· **Trade name:** ALGENEX PLUS

· **Article number:** 104571 1L, 104575 5L, 5031/3

· **Application of the substance / the preparation** Algicide

· **Manufacturer/Supplier:**

TETENAL AG & Co. KG

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· **Further information obtainable from:** Department environment and safety

· **Information in case of emergency:** Poison Information Centre Berlin (Germany): 00 49 (0) 30 19240

2 Hazards identification

· **Hazard description:**



C Corrosive

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

R 34 Causes burns.

R 43 May cause sensitisation by skin contact.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **GHS label elements**



Danger

3.2/1B - Causes severe skin burns and eye damage.



Warning

3.4/1 - May cause an allergic skin reaction.

Warning

3.1/5 - May be harmful if swallowed.

3.1/5 - May be harmful in contact with skin.

4.1/3 - Harmful to aquatic life with long lasting effects.

· **Prevention:**

Do not breathe dust/fume/gas/mist/vapours/spray.

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

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

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

· **Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water.

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IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see label).

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

Wash contaminated clothing before reuse.

· **Storage:**

Store locked up.

· **Disposal:**

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

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Description**

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







· **Identification number(s)**

· **EINECS Number:** 231-791-2

· **Additional information:** the CAS-number to the single components are: 26172-55-4(CIT), 2682-20-2 (MIT)

· **Chemical characterization**

· **Dangerous components:**

55965-84-9	Mixture of 5-Chloro-2-methyl-isothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one with magnesium chloride and magnesium nitrate	1.5%
	 T,  C,  N; R 23/24/25-34-43-50/53	
	Danger:  3.1.O/2, 3.1.D/2, 3.1.I/2, 3.4.S/1;  3.2/1B	
	Warning:  4.1.C/1	

4 First aid measures

· **General information:**

Immediately remove any clothing 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.

· **Information for doctor:**

Hinweise in der GESTIS Gefahrstoffdatenbank: <http://www.hvbg.de/d/bia/gestis/stoffdb/index.html>

· **The following symptoms may occur:** Allergic reactions

· **Treatment**

If swallowed, gastric irrigation with added, activated carbon.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

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5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, 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_x)
Carbon monoxide (CO)
Sulphur dioxide (SO₂)
Hydrogen chloride (HCl)
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
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.
- **Measures for cleaning/collecting:**
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 Sodumbisulfite solution

7 Handling and storage

- **Handling:**
- **Information 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.
- **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

* 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:** Not required.
- **Additional information:** The lists valid during the making were used as basis.

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- **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
- **Protection of hands:**



Protective 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.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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.
 - **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.
Gloves made of nitrile rubber with layer thickness >0,38mm and breakthrough-time >480min
Glove material: Butyl rubber with breakthrough-time: ≥ 480 min, layer thickness: $\geq 0,4$ mm
Glove material: Neopren with breakthrough time: >240 min, layer thickness: >0,65 mm
 - **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**
 - Nitrile rubber, NBR
 - Butyl rubber, BR
 - **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

· General Information

Form:	Fluid
Colour:	Light blue
Odour:	Recognizable

· Change in condition

Melting point/Melting range: 0°C
Boiling point/Boiling range: Undetermined.

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|--|---|
| · Flash point: | Not applicable. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapour pressure at 20°C: | 27 hPa |
| · Density at 20°C: | 1.022-1.032 g/cm ³ |
| · Solubility in / Miscibility with water: | Fully miscible. |
| · pH-value at 20°C: | 1.8-2.6 |
| · Organic solvents: | 0.0 % |
| · Water: | 98.5 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions**
 - Corrosive action on metals.
 - Reacts with amines.
 - Violent reactions with strong alkalis and oxidizing agents.
- **Dangerous decomposition products:** Irritant gases/vapours

11 Toxicological information

· **Acute toxicity:**

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

55965-84-9 Mixture of 5-Chloro-2-methyl-isothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one with magnesium chloride and magnesium nitrate

Oral	LD50	>3000 mg/kg (rat)
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Dermal	LD50	>2000 mg/kg (rat)
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· **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.

· **Sensitisation** May cause sensitisation by skin contact.

12 Ecological information

· **Information about elimination (persistence and degradability):**

· **Other information:** The product is biodegradable.

· **Ecotoxicological effects:**

· **Acquatic toxicity:**

55965-84-9 Mixture of 5-Chloro-2-methyl-isothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one with magnesium chloride and magnesium nitrate

EC50	48h: 0.12 mg/l (daphnia)
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LC50	96h: 0.28 mg/l (Lepomis macrochirus)
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· **Remark:** Harmful to fish

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· 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

13 Disposal considerations**· Product:****· 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

· 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: 8 (C9) Corrosive substances.

· Danger code (Kemler): 80

· UN-Number: 1903

· Packaging group: III

· Hazard label: 8

· Description of goods: 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)

· Maritime transport IMDG:

· IMDG Class: 8

· UN Number: 1903

· Label: 8

· Packaging group: III

· EMS Number: F-A,S-B

· Marine pollutant: No

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· **Proper shipping name:** 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)

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



· **ICAO/IATA Class:** 8
· **UN/ID Number:** 1903
· **Label:** 8
· **Packaging group:** III
· **Proper shipping name:** 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)

· **UN "Model Regulation":** UN1903; DISINFECTANT, LIQUID, CORROSIVE, N.O.S.; 8; III

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:**



C Corrosive

· **Risk phrases:**

34 Causes burns.
43 May cause sensitisation by skin contact.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

2 Keep out of the reach of children.
1 Keep locked up.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
56 Dispose of this material and its container to hazardous or special waste collection point.

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**

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
34 Causes burns.
43 May cause sensitisation by skin contact.

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

- **Department issuing MSDS:** Department product safety
- **Contact:** Mr. Krefz-Burfeind (Tetenal AG & CO.KG Norderstedt, Germany)
- **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 internationale 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
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- *** Data compared to the previous version altered.**

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