
! SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Name of product**Desalgin / Desalgine
410162**1.2. Relevant identified uses of the substance or mixture and uses advised against****Recommended intended purpose(s)**

Algicide for treatment of pool water.

1.3. Details of the supplier of the safety data sheet**Manufacturer/distributor**BAYROL Deutschland GmbH
Robert-Koch-Str. 4, D-82152 Planegg
Phone +49 (0) 89 85701-0, Fax +49 (0) 89 85701-276
E-Mail bayrol@bayrol.de
Internet www.bayrol.de**Advice**E-mail (competent person):
ASchwarzenboeck@bayrol.de**1.4. Emergency telephone number****Emergency advice**Giftnotruf München (oder jedes andere Giftinformationszentrum)
Phone +49 (0) 89 19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to 67/548/EEC or 1999/45/EC**

Xn; R22

Xi; R38

Xi; R41

N; R50

R-phrases

22

Harmful if swallowed.

38

Irritating to skin.

41

Risk of serious damage to eyes.

50

Very toxic to aquatic organisms.

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]Hazard classes and Hazard
categories

Hazard Statements Classification procedure

Acute Tox. 4**H302****Skin Corr. 1B****H314****Aquatic Acute 1****H400****Hazard Statements**

H302

Harmful if swallowed.

H314

Causes severe skin burns and eye damage.

H400

Very toxic to aquatic life.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

GHS05



GHS07



GHS09

Signal word

Danger

Hazard Statements

- H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.

Precautionary Statements

- P102 Keep out of reach of children.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients for labeling

Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides

Special rules for supplemental label elements for certain mixtures

Contains perfume. May produce an allergic reaction.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/ information on ingredients**3.1. Substances**

not applicable

3.2. Mixtures**Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
64-17-5	200-578-6	ethanol	< 5	F R11
68424-85-1	270-325-2	Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides	22	Xn,R21/22; C,R34; N,R50
26062-79-3	---	2-propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	< 2,5	R52/53

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
64-17-5	200-578-6	ethanol	< 5	Flam. Liq. 2, H225
68424-85-1	270-325-2	Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides	22	Acute Tox. 4, H302 / Acute Tox. 4, H312 / Skin Corr. 1B, H314 / Aquatic Acute, H400 / M10
26062-79-3	---	2-propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	< 2,5	Aqu. chron. 3, H 412

REACH

CAS No	Name	REACH registration number
64-17-5	ethanol	01-2119457610-43
68424-85-1	Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides	05-2114132022-72

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

Symptoms of poisoning may not occur for hours, therefore medical supervision for at least 48 hours necessary.

Adhere to personal protective measures when giving first aid.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

Consult a doctor if skin irritation persists.

In case of eye contact

Eye rinsing with water carefully while protecting unhurt eye.

Refer to medical treatment.

In case of ingestion

Do not induce vomiting.

Refer to medical treatment.

Rinse out mouth and give plenty of water to drink.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed**Treatment (Advice to doctor)**

Treat symptoms.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

water

Product does not burn, fire-extinguishing activities according to surrounding.

Foam

Dry fire-extinguishing substance

Dry powder

Carbon dioxide
sand

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

Nitrogen gases (NO_x)

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Hydrogen chloride (HCl)

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.

Wear full protective clothing.

Additional information

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

No information available.

For non-emergency personnel

Use personal protective clothing.

High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Collect contaminated water / firefighting water separately.

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, sawdust).

Flush away residues with water.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

Emergency telephone number: see section 1

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

No special measures necessary if used correctly.

General protective measures

Avoid contact with eyes and skin

Hygiene measures

Do not eat or drink when working.

Keep away from food and drink.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

The product is not combustible.
No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep only in original container.

Advice on storage compatibility

Do not store together with animal feedstuffs.
Do not store together with food.

Further information on storage conditions

Protect from heat and direct solar radiation.

Information on storage stability

Storage time: 5 years.

7.3. Specific end use(s)**Recommendation(s) for intended use**

See section 1.2

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****Respiratory protection**

Breathing apparatus in the event of aerosol or mist formation.

Hand protection

chemical-resistant gloves

Suitable materials (recommended: protection index 6, >480 minutes permeation time according to EN 374)

Nitrile-butadiene rubber (NBR) - 0.4 mm layer thickness

Butyl rubber (butyl) - 0.7mm layer thickness

In view of the many different types, the manufacturers' directions for use must be followed

Eye protection

Safety goggles

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

liquid

Colour

blue

Odour

characteristic

Odour threshold

No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 7	20 °C	100 g/l	potentiometric	
Boiling temperature / boiling range	No information available.				

	Value	Temperature	at	Method	Remark
Melting point / Freezing point	No information available.				
Flash point	71 °C			DIN EN 22719 / ISO 2719	
Vapourisation rate	No information available.				
Flammable (solid)	No information available.				
Flammability (gas)	No information available.				
Ignition temperature	No information available.				
Self ignition temperature	No information available.				
Lower explosion limit	No information available.				
Upper explosion limit	No information available.				
Vapour pressure	No information available.				
Relative density	0,99 g/cm ³	20 °C		aerometric	
Vapour density	No information available.				
Solubility in water					multimiscible
Solubility/other	No information available.				
Partition coefficient n-octanol/water (log P O/W)	No information available.				
Decomposition temperature	No information available.				
Viscosity	No information available.				
Solvent concentration	3,3 %				
Oxidising properties	No information available.				
Explosive properties	No information available.				
9.2. Other information	No information available.				

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

Reactions with acids, alkalies and oxidising agents.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Nitrous oxides (NO_x)

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	ca. 1000 mg/kg	rat		Information concerns to main component.
LD50 acute dermal	ca. 6000 mg/kg	rat		
Irritability skin	corrosive			
Irritability eye	risk of strong eye injuries			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity	No data available			
Reproduction-Toxicity	No data available			
Carcinogenicity	No data available			

Experiences made from practice

Corrosive effect on skin and mucous membrane.

After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicological effects**

	Value	Species	Method	Validation
Daphnia	EC50 0,016 mg/l (48 h)	Daphnia magna		

12.2. Persistence and degradability**Physico-chemical
degradability**

The product can be largely eliminated from the water by abiotic processes, e.g. adsorption to activated sludge.

**Biological
degradability**

> 90 %

OECD 303A

The product is readily biodegradable to OECD criteria.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects**Behaviour in sewage plant**

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

General regulation

Product is not allowed to be discharged into the ground water or aquatic environment.

Marine pollutant (according to IMDG-code)

The ecological figures refer to undiluted 100% pure substance.

The information to ecology refers to main component.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Recommendations for the product**

Remove in accordance with local official regulations.

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement.

Recommendations for packaging

Untaminated packaging may be taken for recycling.

Recommended cleansing agent

Water

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1760	1760	1760
14.2. UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides)	CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides)	Corrosive liquid, n.o.s. (Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides)
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	II	II	II
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

Land and inland navigation transport ADR/RID

Hazard label(s) 8

tunnel restriction code E

Classification code C9

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Authorizations**

PL: 4739/12

Other regulations (EU)

Please note:

Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.

Biocide directive (98/8/EC).

VOC standard**VOC content** 3,3 %**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

Biozide sicher verwenden. Vor Gebrauch stets Kennzeichnung und Produktinformation lesen.

Further information

Refer to product information paper.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 5.1

Sources of key data used

Results of own researches and examinations
Literature informations
Toxicity studies, NIOSH-Tox-Data
National legislation and regulation

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 11 Highly flammable.
R 21/22 Harmful in contact with skin and if swallowed.
R 34 Causes burns.
R 50 Very toxic to aquatic organisms.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H 412 -?-
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.