

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

1.1. Product identifier

Name of product Monats-Set Chlor bis 10m3 (C. 2)
414800

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

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

N; R51/53

R-phrases

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aquatic Acute 1

Aquatic Chronic 1 **H410**

Hazard Statements

H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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



GHS09

Signal word

Warning

Hazard Statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

 P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.
 P501 Dispose of contents/ container to an approved waste disposal plant.

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
25988-97-0		Polymer of N-Methylmethanamine with (chloro methyl)oxirane	4	Xn R22; N R50/53
26062-79-3	---	2-propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	< 20	R52/53

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
25988-97-0		Polymer of N-Methylmethanamine with (chloro methyl)oxirane	4	Aquatic acute 1, H400 / Aquatic chronic 1, H410 / Acute Tox. 4, H302
26062-79-3	---	2-propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	< 20	Aqu. chron. 3, H 412

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

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

Carbon dioxide

sand

5.2. Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Carbon dioxide (CO₂)

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

For non-emergency personnel

Use personal protective clothing.

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Take up with absorbent material.

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**

No information available.

8.2. Exposure controls**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

tightly fitting goggles

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

granules

Colour

blue

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 7	20 °C	10 g/l		
Boiling temperature / boiling range	not determined				
Melting point / Freezing point	not determined				
Flash point	not applicable				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	not determined				
Vapour density	not determined				
Solubility in water					multimiscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				

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

No information available.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials
Materials to avoid

Reactions with strong oxidising agents.

10.6. Hazardous decomposition products
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	No data available			

Subacute Toxicity - Carcinogenicity

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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 0,077 mg/l (96 h)	Oncorhynchus mykiss		
Daphnia	EC50 0,14 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.

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

Uncontaminated packaging may be taken for recycling.

Recommended cleansing agent

Water

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3077	3077	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (Polymer of N-Methylmethanamine with (chloro methyl)oxirane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polymer of N-Methylmethanamine with (chloro methyl)oxirane)	Environmentally hazardous substance, solid, n.o.s. (Polymer of N-Methylmethanamine with (chloro methyl)oxirane)
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	III	III	III
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) 9

tunnel restriction code E

Classification code M7

Marine transport IMDG

MARINE POLLUTANT

SECTION 15: Regulatory information

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

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).

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.

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: 5.2

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 22 Harmful if swallowed.

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

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

H 412 -?-

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.