

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

### 1.1. Product identifier

Name of product Bayrosoft  
414311

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Recommended intended purpose(s)

Disinfection, oxidation, algae prevention and hardness stabilizer 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.eu

### 1.4. Emergency telephone number

NCEC, Phone (+44)(0)1865407333

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Acute Tox. 4	H302	
Eye Dam. 1	H318	
Aquatic Acute 1		
Aquatic Chronic 2	H411	

#### Hazard Statements

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

### 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.
H318	Causes serious eye damage.

H411 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.  
 P234 Keep only in original container.  
 P235 Keep cool.  
 P270 Do not eat, drink or smoke when using this product.  
 P273 Avoid release to the environment.  
 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.  
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.  
 P391 Collect spillage.  
 P405 Store locked up.  
 P501 Dispose of contents/ container to an approved waste disposal plant.

#### Hazardous ingredients for labeling

hydrogen peroxide solution ...%

#### 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 Regulation (EC) No 1272/2008 [CLP/GHS]
7722-84-1	231-765-0	hydrogen peroxide solution ...%	32,6	Ox. Liq. 1, H271 / Acute Tox. 4, H332 / Acute Tox. 4, H302 / Skin Corr. 1A, H314
25988-97-0		Polymer of N-Methylmethanamine with (chloro methyl)oxirane	2,3	Acute Tox. 4, H302 / Aquatic Acute 1, H400 M=10 / Aquatic Chronic1, H410 M=1 /

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose it safely.  
 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.  
 Refer for medical treatment.

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**In case of eye contact**

Rinse immediately with plenty of water for at least 15 minutes.  
Keep eye wide open while rinsing.  
Call for a doctor immediately.

**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**

**Physician's information / possible dangers**

risk of strong eye injuries

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

**Treatment (Advice to doctor)**

Treat symptoms.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

water

**5.2. Special hazards arising from the substance or mixture**

The product is not combustible, but supports burning by evolving oxygen gas in the heat of fire.

**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.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Use personal protective clothing.  
Keep away sources of ignition.

**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 (e.g. general-purpose binder).  
Flush away residues with water.  
Do not take up with sawdust or other combustible materials.

**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

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Open and handle container with care!  
Do not return residues to the storage containers.  
Take the usual precautions when handling with chemicals.

#### 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

Keep away from sources of ignition  
Emergency cooling must be provided for the eventuality of a fire in the vicinity.  
The product is not combustible, but supports burning.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep only in original container ( with safety valve).

#### Advice on storage compatibility

Do not store with combustible materials.  
Do not store together with food.

#### Further information on storage conditions

Protect from heat and direct solar radiation.  
Container should not be gas-tight closed.  
Keep in a cool place, heat causes increase in pressure and risk of bursting.

#### Information on storage stability

Storage time: 5 years.

### 7.3. Specific end use(s)

#### Recommendation(s) for intended use

See section 1.2

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## 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

Face shield

Safety goggles

**Other protection measures**  
protective overalls

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b> liquid	<b>Colour</b> colourless	<b>Odour</b> odourless
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**Odour threshold**  
not determined

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value</b>	2-4	20 °C		potentiometric	
<b>boiling point</b>	107 °C		1013 mbar		
<b>melting point</b>	-26 °C				
<b>Flash point</b>	not applicable				
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>	not determined				
<b>Lower explosion limit</b>	not applicable				
<b>Upper explosion limit</b>	not applicable				
<b>Vapour pressure</b>	18 hPa	20 °C			
<b>Relative density</b>	1,13 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>					multimiscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				

	Value	Temperature	at	Method	Remark
<b>Viscosity</b>	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**

Reactions with impurities.

Reactions with organic substances.

Reactions with alkalies and metals.

**10.2. Chemical stability**

Decomposition takes place from temperatures above:

&gt;60°C

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

No information available.

**10.5. Incompatible materials**
**Substances to avoid**

Alkali (lye)

Acid

Reducing agent

**10.6. Hazardous decomposition products**

Oxygen

**SECTION 11: Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	1000 mg/kg	rat		
<b>LD50 acute dermal</b>	4060 mg/kg	rabbit		
<b>Eye irritation</b>	risk of strong eye injuries			

**Subacute Toxicity - Carcinogenicity**

Value	Species	Method	Validation
<b>Mutagenicity</b>			No information available.
<b>Reproduction-Toxicity</b>			No information available.
<b>Carcinogenicity</b>			No information available.

**Experiences made from practice**

Product discolours skin.

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

**Additional information**

The declarations of toxicology refer to main component.

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

	Value	Species	Method	Validation
<b>Fish</b>	LC50 0,077 mg/l (96 h)	Oncorhynchus mykiss	OECD 203	
<b>Daphnia</b>	EC50 0,08 mg/l (48 h)	Daphnia magna	OECD 202	
<b>Algae</b>	EC50 0,13 mg/l	Scenedesmus subspicatus	OECD 201	

**12.2. Persistence and degradability**

No information available.

**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**
**General regulation**

The following ecotoxicological data refer to:

Polymer aus N-Methylmethanamin mit (Chlormethyl)oxiran

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Waste code No.**

16 05 09

**Name of waste**

discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

**Recommendations for the product**

Remove in accordance with local official regulations.

Dispose of as hazardous waste.

The product should not be allowed to enter drains, water courses or the soil.

**Recommendations for packaging**

Uncontaminated packaging may be taken for recycling.

**Recommended cleansing agent**

Water

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA-DGR
<b>14.1. UN number</b>	2014	2014	2014
<b>14.2. UN proper shipping name</b>	HYDROGEN PEROXIDE, AQUEOUS SOLUTION	HYDROGEN PEROXIDE, AQUEOUS SOLUTION	Hydrogen peroxide, aqueous solution
<b>14.3. Transport hazard class(es)</b>	5.1 (8)	5.1 (8)	5.1 (8)
<b>14.4. Packing group</b>	II	II	II
<b>14.5. Environmental hazards</b>	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) 5.1+8  
 tunnel restriction code E  
 Classification code OC1

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

Regulation (EU) 1272/2008 (CLP), Regulation (EU) 1907/2006 (REACH), DECISION 2000/532/EG (list of wastes)  
 Regulation (EU) 528/2012 (BPR)

**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.  
 Acquisition, possession or use by the general public is restricted.

**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: 6.2

**Sources of key data used**

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

H271 May cause fire or explosion; strong oxidiser.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.