

! SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Name of product Bordnet (Spray bottle)
414890

1.2. Relevant identified uses of the substance or mixture and uses advised against**Recommended intended purpose(s)**

Alkaline cleaner

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**

Xi; R36/38

R-phrases

36/38 Irritating to eyes and skin.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Skin Irrit. 2	H315
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Eye Irrit. 2	H319
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Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS07

Signal word

Warning

Hazard Statements

H315 Causes skin irritation.
 H319 Causes serious eye irritation.

Precautionary Statements

P102 Keep out of reach of children.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302 + P352 IF ON SKIN: 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

potassium-hydroxide

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
111-76-2	203-905-0	2-butoxyethanol	< 10	Xn R20/21/22; Xi R36/38
1310-58-3	215-181-3	potassium-hydroxide	< 2	Xn R22; C R35
37971-36-1	253-733-5	2-Phosphonbutan-1,2,4-Tricarboxylsäure	2,5	

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
111-76-2	203-905-0	2-butoxyethanol	< 10	Acute Tox. 4, H332 / Acute Tox. 4, H312 / Acute Tox. 4, H302 / Eye Irrit. 2, H319 / Skin Irrit. 2, H315
1310-58-3	215-181-3	potassium-hydroxide	< 2	Acute Tox. 4, H302 / Skin Corr. 1A, H314
37971-36-1	253-733-5	2-Phosphonbutan-1,2,4-Tricarboxylsäure	2,5	Met. korr. 1, H290

Additional advice

Neutralisationsreaktion

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.

5.2. Special hazards arising from the substance or mixture

No information available.

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.

6.2. Environmental precautions

Product should not be discharged in an undiluted or non-neutralized form into sewage or the environment

6.3. Methods and material for containment and cleaning up

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

Keep container tightly closed.

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****Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)**

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
111-76-2	2-butoxyethanol	8 hours	98	20	skin
		Short-term	246	50	

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

tightly fitting goggles

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

liquid

Colour

colourless

Odour

sweetish

Odour threshold

No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	9,8	20 °C	100 g/l	potentiometric	
Boiling temperature / boiling range	No information available.				
Melting point / Freezing point	No information available.				
Flash point	No flash point below 100°C.				
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	1,036 g/cm ³	20 °C		aerometric	
Vapour density	No information available.				

	Value	Temperature	at	Method	Remark
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.				
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 strong acids.

Reactions with base metals, with evolution of hydrogen.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Materials to avoid

Acid

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

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
Irritability skin	irritant			

	Value/Validation	Species	Method	Remark
Irritability eye	irritant			

Subacute Toxicity - Carcinogenicity

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

Experiences made from practice

Irritates mucous membranes.

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

No information available.

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	> 90 % The organic component of the product is biodegradable.			

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**

The product is an alkaline solution. Neutralization is normally necessary before waste water is discharged into sewage treatment plants.

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	1814	1814	1814
14.2. UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide solution
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	III	III	III
14.5. Environmental hazards	No	No	No

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 C5

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.

Regulation (EC) No 648/2004 (Detergents regulation).

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: 2.6

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 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 22 Harmful if swallowed.

R 35 Causes severe burns.

R 36/38 Irritating to eyes and skin.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.