Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Version: 1 Language: EN Revision date: 29.07.2011

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Total Hardness

(Batch 1011 and later)

CAS number: -
EC number (EINECS/ELINCS): -
EC index number: -
REACH registration number: -

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

Identified uses of the substance or mixture: Reagent for water analysis
Not recommended uses of the substance or mixture: Other:

1.3 Details of the supplier of the safety data sheet

Manufacturer
Pool-i.d. GmbH
Telephone: +49 (0) 721 782 029 0
Daimlerstraße 20 **Fax:** +49 (0) 721 782 029 11
D 76344 Eggenstein-Leopoldshafen

Supplier
Pool-i.d. GmbH
Telephone: +49 (0) 721 782 029 0
Daimlerstraße 20 **Fax:** +49 (0) 721 782 029 11
D 76344 Eggenstein-Leopoldshafen

Information contact
Pool-i.d. GmbH
Information Telephone: +49 (0) 721 782 029 0
Information fax: +49 (0) 721 782 029 11
E-mail (competent person): info@pool-id.com
Website: http://www.pool-id.com/

1.4 Emergency telephone number

Giftnotruf München **Telephone:** +49 (0) 89 19 240
Toxikologischen Abteilung, II.Med. Klinik der Technischen Universität München

1.5 Dept. responsible for information

Laboratory

2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008:
Skin Irrit. 2; H315 , Eye Irrit. 2; H319

Directive 67/548/EEC:
Xi; R36/38

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms:

GHS07

Signal word: Warning

H phrases:
315 Causes skin irritation.
319 Causes serious eye irritation.

P phrases:
101 If medical advice is needed, have product container or label at hand.
102 Keep out of reach of children.
264 Wash with water thoroughly after handling.
270 Do no eat, drink or smoke when using this product.
280 Wear protective gloves/protective clothing/eye protection/face protection.
302+352 IF ON SKIN: Wash with plenty of soap and water.
305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
321 Specific treatment (see on this label).
332+313 If skin irritation occurs: Get medical advice/attention.
337+313 If eye irritation persists: Get medical advice/attention.
362 Take off contaminated clothing and wash before reuse.

2.2.2 Labelling according to Directive 67/548/EEC

Hazard symbols:

Xi Irritant.

R phrases:
36/38 Irritating to eyes and skin.

S phrases:
1/2 Keep locked up and out of the reach of children.
13 Keep away from food, drink and animal feedingstuffs.
20/21 When using do not eat, drink or smoke.
24/25 Avoid contact with skin and eyes.
28 After contact with skin, wash immediately with plenty of water
37 Wear suitable gloves.

2.3 Other hazards

See attachted safety data sheets and/or usage instructions.

3. Composition/information on ingredients

3.1 Chemical characterization of the substance or mixture

Tablets, among other things, with the following ingredients.

3.2 Composition of the substance or mixture

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):	Classification: 67/548/EEC:
Lithium hydroxide	215-183-4	1310-65-2			< 5 Wt.-%	Acute Tox. 4; H302 Acute Tox. 3; H331 Skin Corr. 1B; H314	Xn; R22 T; R23 C; R34

Ingredients with EC exposure limits

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):	Classification: 67/548/EEC:

(The wording of the listed risk phrases is given in Chapter 16)

3.3 Additional information

none

4. First aid measures

4.1 Description of first aid measures

General information: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

Following inhalation: Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

After skin contact: After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

Following eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion: Rinse mouth immediately and drink large quantities of water. Do not induce vomiting. No administration in cases of unconsiousness or cramps. Immediately get medical attention.

Self-protection: No special measures are necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No symptoms known up to now.

Nature of Hazard: No risks worthy of mention.

4.3 Indication of any immediate medical attention and special treatment needed

Emergency aid: Let water be swallowed in little sips (dilution effect). Do not induce vomiting.

Treatment: Treat symptomatically.

5. Fire fighting measures

5.1 General information

Extinguishing materials should be selected according to the surrounding area.

5.2 Extinguishing media

Suitable: Water fog. Carbon dioxide (CO2). Foam. Dry extinguishing powder.

Unsuitable: High power water jet.

5.3 Special hazards arising from the substance or mixture

Pyrolysis products, toxic. Carbon dioxide. Carbon monoxide.

5.4 Advice for fire fighters

Special protective equipment for fire-fighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Guide people to safety.

6.2 Environmental precautions

No special environmental protection measures are necessary.

6.3 Methods and materials for containment and cleaning up

Remove mechanically, placing in appropriate containers for disposal.

6.4 References to other sections

See protective measures under point 7 and 8.

7. Handling and storage

7.1 Precautions for safe handling

Information for safe handling
Avoid contact with eyes.

Technical measures
No special technical protective measures are necessary.

Precautions against fire and explosion
Usual measures for fire prevention.

Additional information
none

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
No special technical protective measures are necessary.

Packaging materials
Keep/Store only in original container.

Requirements for storerooms and containers
Keep the packing dry and well sealed to prevent contamination and absorbtion of dampness.

Information about storing together in storage facility
Keep away from food, drink and animal feedingstuffs.

Further information concerning storage conditions
none

Storage class: 11 Combustible solids.

7.3 Specific end use(s)

Observe instructions for use.

8. Exposure controls / personal protection

8.1 Control parameters

8.1.1 Limits for occupational exposure

Exposure limit values

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:

EC exposure limit values

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
Lithium hydroxide	1310-65-2				

8.1.2 DNEL and PNEC values

DNEL-values

Substance:	CAS-No.:	DNEL/DMEL	Industry	Professional	consumer

PNEC-values

Substance:	CAS-No.:	PNEC	Worker, industry	Worker, professional	consumer

8.1.3 Control-Banding

Control-Banding

none

8.1.4 Additional information

none

8.2 Exposure controls

Occupational exposure controls

none

Chemical handling

Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

Personal protection equipment

none

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Eye protection

Eye protection: not required.

Skin protection

Skin protection: not required.

Environmental exposure controls
refer to chapter 7. No further action is necessary.

Consumer exposure controls
refer to chapter 7. No further action is necessary.

8.3 Exposure scenario
none

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

State of matter:	solid: Tablets.
Colour:	white - light violet dotted
Odour:	odourless
Odour threshold:	none

Safety relevant basis data

	Parameter	Value	Unit	Remark
Density:				No data available
Package density:				No data available
pH:	at g/l: 9	9,4		
Melting point / range:				No data available
Boiling temperature / range:				No data available
Flash point:				No data available
Flammability:				No data available
Lower flammability limit:				No data available
Upper flammability limit:				No data available
Explosion hazard:				No data available
Lower explosion limit:				No data available
Upper explosion limit:				No data available
Ignition temperature:				No data available
Decomposition temperature:				No data available
Oxidizing characteristics:				No data available
Vapour pressure:				not applicable
Relative vapour density:				not applicable
Speed of vaporization/evaporation rate:				not applicable
Solubility in water:				partially soluble
Fat solubility:				No data available
Solubility in	:			not applicable
log P O/W (n-octanol / water):				No data available
Viscosity:				not applicable
Solvent separation test:				not applicable
Solvent content:				not applicable

9.2 Other information
none

10. Stability and reactivity

10.1 Reactivity
none

10.2 Chemical stability
The product is stable under normal storage and application conditions.

10.3 Possibility of hazardous reactions
none

10.4 Conditions to avoid
moisture. heat.

10.5 Incompatible materials
Oxidizing agents. Reducing agents. Acid. Alkalis (alkalis).

10.6 Hazardous decomposition products
Can be released in case of fire: Pyrolysis products, toxic. Carbon dioxide. Carbon monoxide.

10.7 Additional information
none

11. Toxicological information

11.1 Information on toxicological effects
Data apply to the principal component.

Acute toxicity

Substance:	CAS-No.:	Toxicological information
Lithium hydroxide	1310-65-2	Acute toxicity, oral LD50: 210 mg/kg (Rat.) Acute toxicity, inhalation LD50: 0,96 mg/kg/4 h (Rat.)

Specific symptoms in laboratory animals
none

11.2 Irritation and etching
Irritant effect on the skin
mild irritant.
Irritant effect on the eye
irritant.
Irritant effect on the respiratory tract
irritant.
Etching
not corrosive

11.3 Sensitization
no danger of sensitization.

11.4 Repeated dose toxicity
No information available.

11.5 CMR effects

Carcinogenicity

No indications of human carcinogenicity exist.

Mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

11.6 General remarks

none

Practical experience

none

Other observations

none

Additional information

Data arise from reference works and literature.

12. Ecological information

12.1 Toxicity

none

Eco toxicity

Substance:	CAS-No.:	Ecotoxicity

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.
Organic part of product is bio-degradable.

12.3 Bio accumulative potential

No indication of bio-accumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6 Other adverse effects

none

12.7 Further ecological information

Do not empty into drains or the aquatic environment. Do not allow to enter into soil/subsoil.

12.8 Further details

Data arise from reference works and literature.

13. Disposal considerations

13.1 Waste treatment methods

Appropriate disposal/Product
Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

Appropriate disposal/ packaging
Cleaned containers may be recycled. Handle contaminated packaging in the same way as the substance itself.

Control report for waste code/ waste marking according to EAKV
According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste key product:	07 07 99 - Wastes n. o. s.
Waste key packaging:	15 01 10 - Packaging containing residues of or contaminated by dangerous substances

Remark
Waste disposal according to official state regulations.

14. Transport information

14.1 Overland transport (ADR/RID)

Proper Shipping name
-
-
UN No.: -
Label: - **Packing Group:** - **Classification code:** -
Remark: Not a hazardous material with respect to these transportation regulations.

14.2 Transport by sea (IMDG)

Proper Shipping name

-
UN-No.: -
Label: - **Packing Group:** -
EmS-No: - **MFAG:** - **Marine pollutant:** -
Special Provisions: Keep away from food, drink and animal feedingstuffs.
Remark: Not a hazardous material with respect to these transportation regulations.

14.3 Air transport (ICAO-TI / IATA-DGR)

Proper Shipping name
-
-
UN/ID-No.: -
Label: - **Packing Group:** -
Remark: Not a hazardous material with respect to these transportation regulations.

14.4 Mail

Not a hazardous material with respect to these transportation regulations.

15. Regulatory information

15.1 Labelling

Hazardous component(s) for labelling

-

Special labelling of particular preparations

-

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

EU-Regulations

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL)

none

Regulation (EC) No 2037/2000 on substances that deplete the ozone layer

none

Regulation (EC) No 850/2004 on persistent organic pollutants

none

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals

none

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

none

Restrictions under Title VIII of Regulation (EC) No 1907/2006

none

National regulations

Moreover, national legislation has to be observed!

Informations on working limitations

none

Major Accidents Ordinance

none

Storage class according to VCI

11 Combustible solids.

Water Hazard Class according to VwVwS

1 weak water pollutant (WGK 1)

Technical Instructions on Air Quality Control (TA-Luft)

none

Further regulations, limitations and legal requirements

none

15.3 Chemical safety assessment

For this preparation a chemical safety assessment has been carried out: -

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

16. Other information

16.1 Wording of the H and R-phrases under paragraph 3

Regulation (EC) No 1272/2008

302 Harmful if swallowed.
314 Causes severe skin burns and eye damage.
331 Toxic if inhaled.

Directive 67/548/EEC

22 Harmful if swallowed.
23 Toxic by inhalation.
34 Causes burns.

16.2 Training instructions

none

16.3 Recommended restrictions of use

refer to chapter 1.

16.4 Further remarks

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

16.5 Documentation of changes

none

16.6 Data sources

Data arise from reference works and literature.

16.7 Key and definition

none

17. Appendix

17.1 Exposure scenario

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