Ammonia No.2 Photometer

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

1.1 - Product identifier

Trade name/designation Ammonia No.2 Photometer
Chemical name
Product-type Mixture
Product code FN02-0007-000

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

Relevant identified uses - Reagent for water analysis

Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

MDE GmbH & Co. KG
Benzstr. 20
82178 Puchheim
Telephone : +49 (0)89 800 72 802
Email: msds@finwell-products.com

1.4 - Emergency telephone number

- Poison Control Center Munich
Tel: +49 (0) 89 / 19 24 0
Germany
24 hour service
Languages: German, English
please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Skin Corr. 1B	Skin corrosion, Category 1B
Eye Dam. 1	Serious eye damage, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3

2.2 - Label elements

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

Contains: Lithium hydroxide monohydrate (CAS No.: 1310-66-3)

Signal word : Danger

Hazard pictograms

Hazard statements

H314	Causes severe skin burns and eye damage
H412	Harmful 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.
P103	Read label before use.
P260	Do not breathe dust, fume.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER, a doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents, container to an appropriate recycling or disposal facility.

EUH-phrases : None

2.3 - Other hazards

PBT-substance. - No information available.

vPvB-substance. - No information available.

Other hazards which do not result in classification - No information available.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
Lithium hydroxide monohydrate	CAS No. : 1310-66-3 Index No. : EC No. : 215-183-4	10 - 20	Acute Tox. 4 Oral - H302 Skin Corr. 1B - H314	Not applicable
troclosene sodium, dihydrate	CAS No. : 51580-86-0 Index No. : 613-030-01-7 EC No. : 220-767-7 REACH No. : 01-2119489371-33-XXXX	1 - 5	Acute Tox. 4 Oral - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Eye Irrit. 2 - H319 STOT SE 3 (H335) - H335	STOT SE 3 (H335) - H335 : 10>=%<0

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation - Provide fresh air.
- When in doubt or if symptoms are observed, get medical advice.

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Following skin contact	- After contact with skin, wash immediately with plenty of water and soap. - Remove contaminated, saturated clothing immediately. - In case of skin reactions, consult a physician.
After eye contact	- In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
After ingestion	- If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Symptoms and effects - Following inhalation	- No information available.
Symptoms and effects - Following skin contact	- No information available.
Symptoms and effects - After eye contact	- Serious eye damage/eye irritation
Symptoms and effects - After ingestion	- No information available.

4.3 - Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media	- ABC-powder - Carbon dioxide (CO_2) - Foam - Extinguishing powder
Unsuitable extinguishing media	- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture	- No information available.
Hazardous decomposition products	- Chlorine (Cl_2) - Hydrogen chloride (HCl) - Carbon dioxide (CO_2) - Carbon monoxide - Hydrogen cyanide (hydrocyanic acid) - Nitrogen oxides (NO_x)

5.3 - Advice for firefighters

- Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	- Use personal protection equipment.

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For emergency responders	- No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment	- Soak up inert absorbent and dispose as waste requiring special attention.
Methods and material for cleaning up	- Take up mechanically, placing in appropriate containers for disposal. - Avoid dust formation. - Clear contaminated areas thoroughly.
Inappropriate techniques	- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation	- Avoid: Eye contact - Avoid: Generation/formation of dust - It is recommended to design all work processes always so that the following is excluded: Eye contact - It is recommended to design all work processes always so that the following is excluded: Skin contact - It is recommended to design all work processes always so that the following is excluded: Inhalation of dust/particles
Advices on general occupational hygiene	- No information available.

7.2 - Conditions for safe storage, including any incompatibilities

- Store in a place accessible by authorized persons only.
- Keep away from: Food and feedingstuffs
- Only use containers specifically approved for the substance/product.

7.3 - Specific end use(s)

- Reagent for water analysis

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls	- No information available.

Individual protection measures, such as personal protective equipment	- Suitable protective clothing: lab coat 
	- Suitable protective clothing: Protective apron 
	- Suitable eye protection: Face protection umbrella 
	- Suitable eye protection:Eye glasses with side protection 
	- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 
	- Suitable material: NBR (Nitrile rubber)

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Solid	Appearance	Tablets
Colour	White	Odour	characteristic

Odour threshold	No data available
pH	12,5 10,5 g/l
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	No data available

Solubility (Water)	very soluble
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- Acids

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- Based on available data, the classification criteria are not met.

Toxicity : Substances

troclosene sodium, dihydrate (51580-86-0)	
LD50 oral (rat)	1671 mg/kg < V < 2094 mg/kg ECHA

Lithium hydroxide monohydrate (1310-66-3)	
LD50 oral (rat)	368 mg/kg
LC50 inhalation dusts and mists (rat)	> 6,15 mg/l 4h (OECD Guideline 403)

Skin corrosion/irritation
- Skin corrosion, Category 1B - Causes severe skin burns and eye damage
- Corrosive.

Serious eye damage/eye irritation
- Serious eye damage, Category 1
- Risk of serious damage to eyes.
- Causes serious eye irritation.
- Corrosive.

Respiratory or skin sensitisation
- Not classified

Germ cell mutagenicity
- Not classified

Carcinogenicity
- Not classified

Reproductive toxicity
- Not classified

STOT-single exposure
- Not classified

STOT-repeated exposure
- Not classified

Aspiration hazard
- Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

troclosene sodium, dihydrate (51580-86-0)	
EC50 48 hr crustacea	0,17 mg/l ECHA
ErC50 algae	100 mg/l ECHA (72h)
NOEC chronic crustacea	160 mg/l ECHA 21d
NOEC chronic algae	0,5 mg/l ECHA (3h)

Lithium hydroxide monohydrate (1310-66-3)	
EC50 48 hr crustacea	33,5 mg/l Daphnia magna (OECD Guideline 202)
LC50 96 hr fish	109 mg/l Danio rerio (OECD Guideline 203)
ErC50 algae	41,62 mg/l Pseudokirchneriella subcapitata

- Harmful to aquatic life with long lasting effects.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oyxgen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- No information available.

- No information available.

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

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Waste treatment methods	- Dispose of waste according to applicable legislation.
Sewage disposal	- Do not empty into drains.
Special precautions for waste treatment	- Waste for disposal is to be classified and labelled. - Do not mix with other wastes. - Consult the appropriate local waste disposal expert about waste disposal.
Community or national or regional provisions	- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

UN number (ADR)	:	UN2680
UN number (RID)	:	UN2680
UN number (ADN)	:	UN2680
UN number (IMDG)	:	UN2680
UN number (IATA)	:	UN2680

14.2 - UN proper shipping name

UN proper shipping name (ADR)	:	LITHIUM HYDROXIDE
UN proper shipping name (RID)	:	LITHIUM HYDROXIDE
UN proper shipping name (ADN)	:	LITHIUM HYDROXIDE
UN proper shipping name (IMDG)	:	LITHIUM HYDROXIDE
UN proper shipping name (IATA)	:	LITHIUM HYDROXIDE

14.3 - Transport hazard class(es)

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ADR Transport hazard class(es)	:	8
ADR Classification code:	:	C6
Pictograms		
Transport hazard class(es) (RID)	:	8
Pictograms		
Transport hazard class(es) (ADN)	:	8
Pictograms		
Transport hazard class(es) (IMDG)	:	8
Pictograms		
Transport hazard class(es) (IATA)	:	8
Pictograms		

14.4 - Packing group

Packing group	:	II
Packing group (RID)	:	II
Packing group (ADN)	:	II
Packing group (IMDG)	:	II
Packing group (IATA)	:	II

14.5 - Environmental hazards

Environmental hazards	:	No
Marine pollutant	:	No

14.6 - Special precautions for user

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ADR		
ADR Classification code:	:	C6
ADR Special provisions	:	
ADR Limited quantity (LQ)	:	1 kg
ADR Excepted quantities	:	E2
ADR Packing instructions	:	P002 IBC08
ADR Special packing provisions	:	B4
ADR Mixed packing provisions	:	MP10
Instructions for portable tanks and bulk containers	:	T3
Special provisions for portable tanks and bulk containers	:	TP33
ADR tank code	:	SGAN
ADR tanks special provisions	:	
Vehicle for tank carriage	:	AT
ADR Transport category	:	2
ADR Tunnel restriction code	:	E
ADR Special provisions loading, unloading and handling	:	
Special provisions - Packages	:	V11
Special provisions - Bulk	:	
Special provisions - Operation	:	
ADR Hazard identification number (Kemler No.)	:	80
RID		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
ADN		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
IMDG		
Special provisions	:	
Limited quantity (LQ)	:	
Excepted quantities	:	
Packing instructions	:	
Special packing provisions	:	
IBC instruction(s)	:	
IBC provisions	:	
Instructions for portable tanks and bulk containers	:	
Special provisions for portable tanks and bulk containers	:	
EmS codes	:	
Stowage and handling	:	
Segregation	:	
Properties and observations	:	

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IATA

PCA - Excepted quantities	:
PCA - Limited Quantity - Packing Instructions	:
PCA - Limited Quantity - Maximum Net Quantity per Package	:
PCA - Packing Instructions	:
PCA - Maximum Net Quantity per Package	:
CAO - Packing Instructions	:
CAO - Maximum Net Quantity per Package	:
Special Provisions	:
ERG Code	:

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

SECTION 15: Regulatory information

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

Substances REACH candidates	None
Substances Annex XIV	None
Substances Annex XVII	None

VOC content: No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product: - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	08.04.2019	MSDS creation

Abbreviations and acronyms: - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation - Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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Skin Corr. 1B	Skin corrosion, Category 1B
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)

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.

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