

Safety Data Sheet

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

NYOS® MAGNESIUM REEFER

Date of issue: 11.05.2021

Version: 1.03

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

1.1 Product identifier: NYOS® MAGNESIUM REEFER

Aquarium test kit for analytical use

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

Relevant identified uses:

Product for analytical use.

Uses advised against:

None known.

1.3 Details of the supplier of the safety data sheet:

Nyos Aquatics GmbH
Daimlerstraße 27
70825 Korntal-Münchingen / GERMANY
Phone +49 (0) 711-50875454
Fax +49 (0) 711-50875494
Email: info@nyos.info

Address enquiries to

Technical information: info@nyos.info

Safety Data Sheet: info@nyos.info

1.4 EMERGENCY TELEPHONE NUMBER:

DE: Gemeinsames Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730.

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.

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2. Hazards identification

2.0 Classification of the complete product

<i>Directive 1999/45/EC</i>	-
Symbols	do not need labelling as hazardous
<i>CLP Directive 1272/2008/EC</i>	
GHS pictograms	do not need labelling as hazardous
Signal word	-
No hazard class	

2.1 Classification of the substance or mixture

50ml MG-1

<i>Directive 1999/45/EC</i>	-
Symbols	do not need labelling as hazardous
<i>CLP Directive 1272/2008/EC</i>	
GHS pictograms	do not need labelling as hazardous
Signal word	-
No hazard class	

5g MG-2

<i>Directive 1999/45/EC</i>	-
Symbols	do not need labelling as hazardous
<i>CLP Directive 1272/2008/EC</i>	
GHS pictograms	do not need labelling as hazardous
Signal word	-
No hazard class	

50ml MG-3

<i>Directive 1999/45/EC</i>	-
Symbols	do not need labelling as hazardous
<i>CLP Directive 1272/2008/EC</i>	
GHS pictograms	do not need labelling as hazardous
Signal word	-
No hazard class	

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2.2 Label elements

50ml MG-1

Directive 1999/45/EC

Symbols:

-

-

CLP Directive 1272/2008/EC

GHS pictograms:

do not need labelling as hazardous

Signal word: -

5g MG-2

Directive 1999/45/EC

Symbols:

-

-

CLP Directive 1272/2008/EC

GHS pictograms:

do not need labelling as hazardous

Signal word: -

50ml MG-3

Directive 1999/45/EC

Symbols:

-

-

CLP Directive 1272/2008/EC

GHS pictograms:

do not need labelling as hazardous

Signal word: -

2.3 Other hazards

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

50ml MG-1

Chemical: ammonia solution
Concentration: < 1,00 %
Formula: $\text{NH}_3 \cdot \text{H}_2\text{O}$
Pseudonym: ammonium hydroxide

CAS No.: 1336-21-6

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REACH Reg. No.:	01-2119488876-14-xxxx	Indice No.:	007-001-01-2
EC No.:	215-647-6	MFC D:	00011418
RTECS:	BQ9625000		
TSCA Inventory:	listed		
KE No.:	KE-01688, >10% Toxic 97-1-184		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

5g MG-2

Chemical:	<i>eriochrome black T</i>	CAS No.:	1787-61-7
Concentration:	< 1,00 %		
Formula:	C ₂₀ H ₁₂ N ₃ NaO ₇ S		
Pseudonym:	<i>chrome black T, 2-Hydroxy-1-(1-hydroxy-2-naphthylazo)-6-nitronaphthalene-4-sulfonic acid sodium salt, EX0100-5, EX0100</i>		
EC No.:	217-250-3		
TSCA Inventory:	listed		
acc. 1999/45/EC:	R36,351/53	acc. CLP (GHS):	H319

50 mL MG-3

Chemical:	<i>ethylenedinitrilo tetraacetic acid, di Na-salt (EDTA-Na)</i>	CAS No.:	6381-92-6
Concentration:	< 1,00 %		
Formula:	C ₁₀ H ₁₄ N ₂ Na ₂ O ₈ • 2 H ₂ O		
EC No.:	205-358-3		
RTECS: AH4410000;	AH4375000	MFC D:	00150037
TSCA Inventory:	not listed		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

3.3 Remarks

List of R and H phrases: see chapter 16

4. First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Remove contaminated clothing. Show product package, packing insert and this material safety data sheet to the doctor.

Following inhalation:

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. If vomiting and if insensible place patient in recovery position and keep airways free.

Following skin contact:

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

Following eye contact:

After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

Following ingestion:

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences.

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4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

5. Firefighting measures

5.1 Extinguishing media:

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible. Danger for environment only in the event of a large-scale leakage or formation of hazardous substances.

5.3 Advice for fire-fighters

No, for listed product. Product package burns like paper or plastic.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours, aerosols. Avoid substance contact. Wear suitable protective gloves (see 8.2.2). Wear eye protection, respectively face protection. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

6.2 Environmental precautions:

none

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6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

none

7. Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package of NYOS® allows a safe storage.
Storage class (German chemical industry): see SECTION 12.1

Requirements for Stock Rooms and Containers

Keep original product packages tightly closed during handling and storage.

8. Exposure controls/personal protection

8.1 Control parameters

50ml MG-1

Chemical: ammonia solution

CAS No.: 1336-21-6

DNEL: 14 inh mg/m³

D NEL = Derived No-Effect Level (for workers)

EU value: 20 ppm / 14 mg/m³

TRGS 900 (DE): 20 ppm / 14 mg/m³

E /e respirable

Short-term exposure factor: 2 (I), Y

skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 20 ppm / 14 mg/m³

Australia NICNAS: not listed Canada CEPA 1999: DSL yes, Toxic Substances (Schedule 1) Yes (Item 53.)

Japan CSCL/PRTR: not listed

Japan PDSCL: Deleterious Substance Yes Japan ISHL: Article 57-2 (SDS required)

South Korea TCCA: not listed

Korea Exist.Chem.Inventory: KE-01688, >10% Toxic 97-1-184

TSCA Inventory: listed California Proposition 65 List: not listed

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5g MG-2

Chemical: *eriochrome black T*
TSCA Inventory: not listed

CAS No.: 1787-61-7

50ml MG-3

Chemical: *ethylenedinitrilo tetraacetic acid, di Na-salt (EDTA-Na)*
TSCA Inventory: not listed

CAS No.: 6381-92-6

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

Respiratory Protection:

Only if additional recommendations in test instruction or packing insert.

Eye protection:

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

Hand protection:

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

Skin protection:

Recommended to avoid clothing damage, and to avoid contamination with these hazards.

Personal Hygiene:

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

50ml MG-1

Appearance: liquid
pH: 10,5

Color: colourless

Odor: aminic

5g MG-2

Appearance: off white powder
pH: not determined
Flammability: Powder is non-combustible
Solubility (water): Completely soluble to give a neutral solution
Boiling point: not determined

Color: colored

Odor: odorless

50ml MG-3

Appearance: liquid
pH: 9-10
Specific gravity: 1,0 g/cm³
Solubility in water: 0-100 %

Color: colourless

Odor: odorless

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9.2 Other information:

Relevant Properties of Substance Group

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Not necessary. When indicated in packing insert.

10.5 Incompatible materials:

Avoid contact with strong acids or alkalines.

10.6 Hazardous decomposition products:

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

11. Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

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50ml MG-1

Chemical:	<i>ammonia solution</i>	CAS No.:	1336-21-6
LD50 orl rat :	350 mg/kg		
LC ₅₀ ihl hmn :	5000 mg/m ³		
LC50 ihl rat :	2000 ^{4h} ppm		
LD50 drm rbt :	5000 ppm/5min		

5g MG-2

Chemical:	<i>eriochrome black T</i>	CAS No.:	1787-61-7
TSCA Inventory:	not listed		

50ml CA-3

Chemical:	<i>ethylendinitrilo tetraacetic acid, di Na-salt (EDTA-Na)</i>	CAS No.:	6381-92-6
LD50 orl rat :	>2000 mg/kg		

12. Ecological information

12.1 Toxicity:

50ml MG-1

Chemical:	<i>ammonia solution</i>	CAS No.:	1336-21-6
PNEC (sweet water):	0.0011 mg/L		
P NEC = Predicted No Effect Concentration			
LC50 fish/96h :	0,89 mg/L		
EC50 daphnia/48h :	101 mg/L		
WGK (DE):	2	WGK No.:	0211
Storage class (VCI):	8 B		

5g MG-2

Chemical:	<i>eriochrome black T</i>	CAS No.:	1787-61-7
TSCA Inventory:	not listed		

50ml MG-3

Chemical:	<i>ethylendinitrilo tetraacetic acid, di Na-salt (EDTA-Na)</i>	CAS No.:	6381-92-6
WGK (DE):	2		
Storage class (VCI):	12-13		

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

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12.6 Other adverse effects:

no data available

13. Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains. Empty containers of corrosive reagents prior to disposal, rinse with water.

14. Transport information

Not necessary

15. Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011 Announcement BekGS 220 (DE), Safety Data Sheet, June 2013

15.2 Chemical Safety Assessment:

not necessary for these small amounts

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16. Other information

16.1 List of R and H phrases

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1.1. List of relevant R phrases

R36/38 Irritating to eyes and skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.1.2 List of relevant H phrases

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

16.2 Training Advice

Regular safety training.

16.3 Recommended Restriction on Use

An individual package of this product or test kit has a moderate hazardous potential.

16.4 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4 th adaptation of CLP regulation to technical and scientific progress

TRGS 900, German engineering rules governing limits in air at work, updated February 2014

SUVA .CH, Limits in air at work 2009, revised on 01.2009

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)
