

Safety Data Sheet

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

NYOS® ALKALINITY TEST KIT

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® ALKALINITY TEST KIT

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.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

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

Directive 1999/45/EC

Symbols -
R -

CLP Directive 1272/2008/EC

GHS pictograms



GHS02

Signal word DANGER

Hazard identification	Hazard classes/categories
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H225	Flammable Liquid cat. 2
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2.1 Classification of the substance or mixture

5 ml CH-1

Directive 1999/45/EC

Symbols - do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms



GHS02

Signal word DANGER

Hazard identification	Hazard classes/categories
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H225	Flammable Liquid cat. 2
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25 ml CH-2

Directive 1999/45/EC

Symbols

-
do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms
Signal word

do not need labelling as hazardous
-

No hazard class

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until **25-125 ml | g** .

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identifier.
Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases **until 125 ml or 125 g** (EU 1272/2008 Annex I - 1.5.2).

5 ml CH-1

Directive 1999/45/EC

Symbols:
-
-

CLP Directive 1272/2008/EC

GHS pictograms:



GHS02

Signal word: DANGER

25 ml CH-2

Directive 1999/45/EC

Symbols:
-
-

CLP Directive 1272/2008/EC

GHS pictograms:
do not need labelling as hazardous
Signal word: -

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2.3 Other hazards

Possible Hazards from physicochemical Properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC, 1999/45/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit.

An individual package has considerably less hazardous potential.

Information pertaining to particular Risks to Human and possible Symptoms

Information pertaining to particular Risks to the Environment

Other Hazards

Flammable properties. Vapour forms explosive mixtures with air.

3. Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

5 ml CH-1

Chemical:	<i>methyl red (pH indicator)</i>	CAS No.:	493-52-7
Concentration:	< 1,00 %		
Formula:	C 15 H 15 N 3 O 2		
Pseudonym:	4-(dimethylamino)-azobenzene-1,2'-carboxylic acid		
EC No.:	207-776-1		
RTECS:	DG8960000	MFCD:	00002425
TSCA Inventory:	listed		
KE No.:	KE-06693		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

Chemical:	<i>ethanol</i> (denatured with MEK)	CAS No.:	64-17-5
Concentration:	55 - 75 %		
Formula:	C 2 H 6 O		
Pseudonym:	ethyl alcohol, methylated spirit		
REACH Reg. No.:	01-2119457610-43-xxxx		
EC No.:	200-578-6	Indice No.:	603-002-00-5
RTECS:	KQ6300000	MFCD:	00003568
TSCA Inventory:	listed		
KE No.:	KE-13217		
acc. 1999/45/EC:	R 11	acc. CLP (GHS):	H225

Chemical:	<i>indicator dye(s)</i>	CAS No.:	-
Concentration:	0,1 - 1 %		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

25 ml CH-2

Chemical:	<i>hydrochloric acid</i>	CAS No.:	7647-01-0
Concentration:	0,1 - 1 %		
Formula:	HCl•H 2 O		
REACH Reg. No.:	01-2119484862-27-xxxx		

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EC No.:	231-595-7	Indice No.:	017-002-01-X
TSCA Inventory:	listed		
KE No.:	KE-20189, >10%	Toxic 97-1-203, Acc. Precaution Chem.	
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.

Following inhalation:

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free.

Following skin contact:

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

Following eye contact:

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

Following ingestion:

After oral intake lots of water should be drunk after it has been ingested.

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

Treat symptomatically.

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.

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5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible.

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. Regular staff training is necessary.

6.2 Environmental precautions:

none

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. 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.

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8. Exposure controls/personal protection

8.1 Control parameters

5 ml CH-1

Chemical: *methyl red (pH indicator)* CAS No.: 493-52-7
Korea Exist.Chem.Inventory: KE-06693
TSCA Inventory: listed

Chemical: *ethanol* CAS No.: 64-17-5
DNEL: 950 inh-sys mg/m³
DNEL = Derived No-Effect Level (for workers)
TRGS 900 (DE): 500 mL/m³ / 960 mg/m³
E /e respirable

Short-term exposure factor: 2 (II), Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
SUVA(CH) MAK value: 500 ppm / 960 mg/m³

TRGS 905 (DE): K5, M5, R F C
Australia NICNAS: not listed Canada CEPA 1999: DSL yes
Japan CSCL/PRTR: not listed Japan ISHL: Article 57-2 (SDS required)
Japan PDSCL: not listed
South Korea TCCA: not listed
Korea Exist.Chem.Inventory: KE-13217 California Proposition 65 List: listed
TSCA Inventory: listed
NIOSH: not listed
OSHA: 1000 ppm / 1900 mg/m³

Chemical: *indicator dye(s)* CAS No.: -

25 ml CH-2

Chemical: *hydrochloric acid* CAS No.: 7647-01-0
DNEL: 8 in h mg/m³
D NEL = Derived No-Effect Level (for workers)

EU value: 5 ppm / 8 mg/m³
TRGS 900 (DE): 2 mg/m³ / 3 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: 2 ppm / 3* mg/m³
Australia NICNAS: not listed Canada CEPA 1999: DSL Yes
Japan CSCL/PRTR: not listed Japan ISHL: Article 57-2 (SDS required)
Japan PDSCL: Deleterious Substance Yes
South Korea TCCA: Accident Precaution Chemical Yes
Korea Exist.Chem.Inventory: KE-20189, >10% Toxic 97-1-203, Acc. Precaution Chem.
TSCA Inventory: listed California Proposition 65 List: not listed
NIOSH: 5 ppm / 7 mg/m³
OSHA: List of highly hazardous chemicals, toxics and reactives Yes (TQ = 5000 lbs) n/a; TWA 5 ppm / 7 mg/m³

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.

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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:

Not necessary.

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

5 ml CH-1

Appearance : liquid

Color : red

Odor : alcoholic

pH:

-

Specific gravity:

0,88 g/cm³

25 ml CH-2

Appearance : liquid

Color : colourless

Odor : odorless

pH:

1-2

Specific gravity:

1,00 g/cm³

Solubility in water:

0-100 %

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

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10.4 Conditions to avoid

Not necessary. When indicated in packing insert.

10.5 Incompatible materials:

Not necessary.

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.

5 ml CH-1

Chemical:	<i>methyl red (pH indicator)</i>	CAS No.: 493-52-7
Chemical:	<i>ethanol</i>	CAS No.: 64-17-5
LD50 orl rat :	6200 mg/kg	
LC _{Low} ihl gpg :	21.9 g/m ³	
LC _{Low} orl hmn :	1400 mg/kg	
LC50 ihl mouse :	39 4h g/m ³	
LC50 ihl rat :	20 10h g/m ³	
LD50 drn rbt :	20 000 mg/kg	
LD50 oral mouse :	3450 mg/kg	

Chemical: *indicator dye(s)* CAS No.: -

25 ml CH-2

Chemical:	<i>hydrochloric acid</i>	CAS No.: 7647-01-0
LD50 orl rat :	900 mg/kg	
LC50 drn rbt :	>5010 mg/kg	

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12. Ecological information

12.1 Toxicity:

5 ml CH-1

Chemical: *methyl red (pH indicator)*

CAS No.: 493-52-7

WGK (DE): 2

Storage class (VCI): 12-13

Chemical: *ethanol* CAS No.: 64-17-5

PNEC (s weet water) : 0.96 mg/L

PNEC = Predicted No Effectd Concentration

LC50 daphnia magna/48h : >100 mg/L

LC50 pimephales promelas/96h : 13400 - 15100 mg/L

LC50 leuciscus idus/96h : 8140 48h mg/L

LC50 fish/96h : 13 g/L

EC50 daphnia/48h : 9.3-14.2 g/L

IC50 scenedesmus quadricauda/72h : 5000 7d mg/L

EC10 pseudomonas putita/16h : EC5: 6500 mg/L

WGK (DE): 1 WGK No.: 0096

Dispersion coefficient (o-w): -0.31

Storage class (VCI): 3

Chemical: *indicator dye(s)*

CAS No.: -

Storage class (VCI): 12-13

25 ml CH-2

Chemical: *hydrochloric acid*

CAS No.: 7647-01-0

PNEC (s weet water) : 36 µg/L

PNEC = Predicted No Effectd Concentration

LC50 fish/96h : 24.6 mg/L

EC50 daphnia/48h : 0.492 mg/L

EC50 pseudokirchneriella subcapitata/72h : 0.78 mg/L

WGK (DE): 1 WGK No.: 0238

Storage class (VCI): 8 B

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

12.6 Other adverse effects:

no data available

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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.

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

16. Other information

16.1 List of R and H phrases

16.1.1. List of relevant R phrases

R11 Highly flammable.

16.1.2 List of relevant H phrases

H225 Highly flammable liquid and vapour.

16.2 Training Advice

Regular safety training.

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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)
