

Safety Data Sheet acc. to OSHA HCS

Printing date 05/20/2015

Reviewed on 05/20/2015

1 Identification

• **Product identifier**

- Trade name: AQUANOX A4639
- Application of the substance / the mixture: Cleaning agent/ Cleaner

• **Details of the supplier of the safety data sheet**

- Manufacturer/Supplier:
KYZEN
430 Harding Industrial Drive
NASHVILLE, TN 37211 USA
P: 1-800-845-5527
www.KYZEN.com
- Information department: Product safety department
- Emergency telephone number:
CHEMTREC
Within the USA and Canada: 1-800 424-9300
Outside the USA and International: +1-703-527-3887

2 Hazard(s) identification

• **Classification of the substance or mixture**



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

• **Label elements**

- GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms



GHS05

- Signal word Danger
- Hazard-determining components of labeling:
2-(2-aminoethoxy)ethanol

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- Hazard statements
Causes severe skin burns and eye damage.
- Precautionary statements
Do not breathe dusts or mists.
Wear eye protection / face protection.
Wash thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



- **Other hazards**

- Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

929-06-6	2-(2-aminoethoxy)ethanol	10-<25%
97-99-4	tetrahydro-2-furylmethanol	10-<25%
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	1-≤2.5%
29385-43-1	methyl-1H-benzotriazole	1-≤2.5%

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4 First-aid measures

- **Description of first aid measures**

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - Protective equipment: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**

- Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about protection against explosions and fires: No special measures required.

- **Conditions for safe storage, including any incompatibilities**

- Storage:
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Keep receptacle tightly sealed.

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- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:

97-99-4 tetrahydro-2-furylmethanol

WEEL	Long-term value: 2.0 ppm
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- Additional information: The lists that were valid during the creation were used as basis.

- **Exposure controls**

- Personal protective equipment:
 - General protective and hygienic measures:
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - Breathing equipment:
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
 - Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

- Form: Liquid
- Color: Light yellow
- Odor: Mild
- Odour threshold: Not determined.

· pH-value at 20 °C (68 °F): 11.2

· Change in condition

- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: 101 °C (214 °F)

· Flash point: > 101 °C (> 214 °F) (Tag Closed Cup)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 280 °C (536 °F)

- Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

- Lower: 1.5 Vol %
- Upper: 9.7 Vol %

· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

· Density at 20 °C (68 °F): 1.026 g/cm³ (8.562 lbs/gal)

- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

· Solubility in / Miscibility with

- Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

- Dynamic: Not determined.
- Kinematic: Not determined.

· Solvent content:

- VOC content: 615 g/L (EPA Method 24)

· Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

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- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

929-06-6 2-(2-aminoethoxy)ethanol

Oral	LD50	5660 mg/kg (rat)
Dermal	LD50	1190 mg/kg (rabbit)

- **REPRODUCTIVE EFFECTS:** Tetrahydrofurfuryl alcohol, CAS# 97-99-4: Animal dermal, inhalation and feeding studies on this material at relatively high dosage levels have demonstrated systemic toxicity and reproductive toxicity. To date, there is no indication of any adverse chronic health effects in humans from this material in over 40 years of industrial use.

- Primary irritant effect:

- on the skin: Caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.

- **Persistence and degradability** No further relevant information available.

· Behavior in environmental systems:

- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.

· Additional ecological information:

- General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

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- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - Recommendation: Disposal must be made according to official regulations.
 - Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
 - DOT, ADR, IMDG, IATA UN3267
- **UN proper shipping name**
 - DOT Corrosive liquid, basic, organic, n.o.s. (2-(2-Aminoethoxy) ethanol, Sodium metasilicate pentahydrate)
 - ADR 3267 Corrosive liquid, basic, organic, n.o.s. (2-(2-Aminoethoxy) ethanol, Sodium metasilicate pentahydrate)
 - IMDG, IATA CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-(2-AMINOETHOXY)ETHANOL, Sodium metasilicate pentahydrate)
- **Transport hazard class(es)**
 - DOT
 - 
 - Class 8 Corrosive substances
 - Label 8
- ADR, IMDG, IATA
 - 
 - Class 8 Corrosive substances
 - Label 8
- **Packing group**
 - DOT, ADR, IMDG, IATA III
- **Environmental hazards:**
 - Marine pollutant: No
- **Special precautions for user**
 - Warning: Corrosive substances
 - Danger code (Kemler): 80
 - EMS Number: F-A,S-B

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· Segregation groups	Alkalis
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· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
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· Transport/Additional information:	
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· DOT	
· Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":	UN3267, Corrosive liquid, basic, organic, n.o.s. (2-(2-Aminoethoxy) ethanol, Sodium metasilicate pentahydrate), 8, III
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15 Regulatory information

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act): All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS05

- Signal word Danger

- Hazard-determining components of labeling:
2-(2-aminoethoxy)ethanol

- Hazard statements

Causes severe skin burns and eye damage.

- Precautionary statements

Do not breathe dusts or mists.

Wear eye protection / face protection.

Wash thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained herein is based on available data from reliable sources and is accurate to the best of KYZEN Corporation's knowledge at the time of this publication. KYZEN makes no warranty, expressed or implied, of merchantability or fitness for a particular purpose, course of performance or usage of trade. The user is solely responsible for determining the suitability and completeness of such information for their particular application and for adopting appropriate safety precautions. Physical properties listed within are typical values based on samples tested and should not be construed as guaranteed analysis of any specific lot or as specifications for the product. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve additional safety or performance considerations. This data is not to be taken as a warranty or representation for which KYZEN assumes legal or financial responsibility.

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- **Department issuing SDS:** Product safety department

- **Contact:** SDS Coordinator

- Date of preparation / last revision 05/20/2015 / -

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- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

- * Data compared to the previous version altered.

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