Printing date 10/17/2019

Reviewed on 10/17/2019

1 Identification

- · Product identifier
- · Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH
- · Article number: OLI058
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Aqua Solutions, Inc.
 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586
- Information department: Technical Coordinator
 Sherman Nelson sherman@aquasolutions.org
 Emergency telephone number:
- *Chemtrec:* 800-424-9300 *Canutec:* 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

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



· Signal word Warning

· Hazard statements

Causes skin irritation.

Causes serious eye irritation. • **Precautionary statements**

- Wash thoroughly after handling.
- Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

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

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a closed container.

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

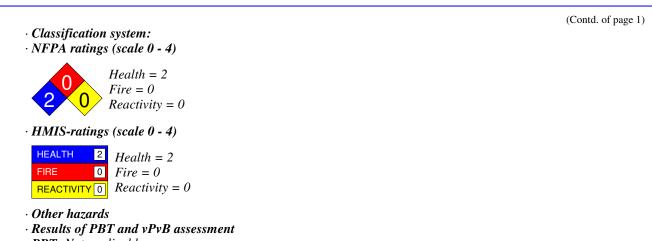
(Contd. on page 2)

US

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH



· **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:

0.59%

99.408%

CAS: 1310-73-2 Sodium Hydroxide · Table of Nonhazardous Ingredients

CAS: 7732-18-5 Water

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. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult 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.

(Contd. on page 3)

Reviewed on 10/17/2019

C C

Printing date 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

(Contd. of page 2)

	tions, protective equipment and emergency procedures Not required. precautions: Dilute with plenty of water.	
	tterial for containment and cleaning up:	
	id-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
	nated material as waste according to item 13.	
Reference to oth		
	information on safe handling.	
	information on personal protection equipment.	
	or disposal information.	
Protective Action	n Criteria for Chemicals	
<i>PAC-1</i> :		
	Sodium Hydroxide	0.5 mg/m
CAS: 1310-73-2	Sodium Hydroxide Diethanolamine	0.5 mg/m ⁻ 3 mg/m ³
CAS: 1310-73-2 CAS: 111-42-2	-	÷
CAS: 1310-73-2 CAS: 111-42-2 PAC-2:	-	÷
CAS: 1310-73-2 CAS: 111-42-2 PAC-2: CAS: 1310-73-2	Diethanolamine	3 mg/m ³
CAS: 1310-73-2 CAS: 111-42-2 PAC-2: CAS: 1310-73-2 CAS: 111-42-2	Diethanolamine Sodium Hydroxide	3 mg/m ³
CAS: 1310-73-2 CAS: 111-42-2 PAC-2: CAS: 1310-73-2 CAS: 111-42-2 PAC-3:	Diethanolamine Sodium Hydroxide	3 mg/m ³

7 Handling and storage

· Handling:

- Precautions for safe handling No special precautions are necessary if used correctly.
- · 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.
- 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:

CAS: 1310-73-2 Sodium Hydroxide

PEL Long-term value: 2 mg/m³

REL Ceiling limit value: 2 mg/m³

TLV Ceiling limit value: 2 mg/m³

• Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 4)

US

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

(Contd. of page 3)

- · 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: Not required.
- 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

· Body protection: Protective work clothing

Information on basic physical and General Information	chemical properties	
Appearance:	· · · ·	
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

	(Contd. of	page
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
• Density at 20 °C (68 °F):	1 g/cm ³ (8.345 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wate	er): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Water:	99.4 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.6 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- \cdot on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

(Contd. on page 6)

US

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

(Contd. of page 5)

2B

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

CAS: 111-42-2 Diethanolamine

• *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: Not hazardous for water.
- · Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- · vPvB: Not applicable.
- · 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.

UN-Number	Not regulated	
· DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name · DOT, ADN, IMDG, IATA	Not regulated	
• Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, IMDG, IATA	Not regulated	
· Environmental hazards:	Not applicable.	

ACTIVE ACTIVE

ACTIVE

ACTIVE

Safety Data Sheet acc. to OSHA HCS

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

		(Contd. of page 6)
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	I of Not applicable.	
· UN "Model Regulation":	Not regulated	

15 Regulatory information

\cdot 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):

CAS: 111-42-2 Diethanolamine

· TSCA (Toxic Substances Control Act):

Sodium Hydroxide

Diethanolamine N-Methyldiethanolamine, 99%

Water

· Hazardous Air Pollutants

CAS: 111-42-2 Diethanolamine

· Proposition 65

· Chemicals known to cause cancer:

CAS: 111-42-2 Diethanolamine

· 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)

CAS: 111-42-2 Diethanolamine

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

None of the ingredients is listed.

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 8)

AЗ

Printing date 10/17/2019

Reviewed on 10/17/2019

Trade name: Mixed Amine Std 0.20 ppm in 150 mM NaOH

(Contd. of page 7) · Hazard pictograms GHS07 · Signal word Warning · Hazard statements Causes skin irritation. Causes serious eye irritation. · Precautionary statements Wash thoroughly after handling. Wear protective gloves / eye protection / face protection. If on skin: Wash with plenty of water. Specific treatment (see on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Store in a closed container. 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

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.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision 10/17/2019 / -· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A