

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

1 Identification

- **Product identifier**
- **Trade name:** MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05
- **Article number:** LY332
- **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 shermann@aquasolutions.org
- **Emergency telephone number:**
Chemtrec: 800-424-9300
Canutec: 613-996-6666



2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Not Applicable
- **Hazard pictograms** Not Applicable
- **Signal word** Not Applicable
- **Hazard statements** Not Applicable
- **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:**

CAS: 4338-98-1	3-Methyl-2-Benzothiazolinone-Hydrazone Hydrochloride	0.4%
----------------	--	------

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 1)

· Table of Nonhazardous Ingredients

CAS: 7732-18-5	Water	>99.598%
CAS: 1310-73-2	Sodium Hydroxide	<0.002%
CAS: 7647-01-0	Hydrochloric Acid	<0.0004%

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **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.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.
- **Protective Action Criteria for Chemicals**

· PAC-1:

CAS: 1310-73-2	Sodium Hydroxide	0.5 mg/m ³
CAS: 7647-01-0	Hydrochloric Acid	1.8 ppm

· PAC-2:

CAS: 1310-73-2	Sodium Hydroxide	5 mg/m ³
CAS: 7647-01-0	Hydrochloric Acid	22 ppm

· PAC-3:

CAS: 1310-73-2	Sodium Hydroxide	50 mg/m ³
----------------	------------------	----------------------

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

CAS: 7647-01-0 Hydrochloric Acid

(Contd. of page 2)

100 ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **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:** None.
- **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 section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**
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:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing

US
(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 3)

9 Physical and chemical properties

· <i>Information on basic physical and chemical properties</i>	
· <i>General Information</i>	
· <i>Appearance:</i>	
Form:	Liquid
Color:	Colorless
· <i>Odor:</i>	Odorless
· <i>Odor threshold:</i>	Not determined.
· <i>pH-value:</i>	Not determined.
· <i>Change in condition</i>	
Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
· <i>Flash point:</i>	Not applicable.
· <i>Flammability (solid, gaseous):</i>	Not applicable.
· <i>Decomposition temperature:</i>	Not determined.
· <i>Ignition temperature:</i>	Product is not selfigniting.
· <i>Danger of explosion:</i>	Product does not present an explosion hazard.
· <i>Explosion limits:</i>	
Lower:	Not determined.
Upper:	Not determined.
· <i>Vapor pressure at 20 °C (68 °F):</i>	23 hPa (17.3 mm Hg)
· <i>Density at 20 °C (68 °F):</i>	1 g/cm ³ (8.345 lbs/gal)
· <i>Relative density</i>	Not determined.
· <i>Vapor density</i>	Not determined.
· <i>Evaporation rate</i>	Not determined.
· <i>Solubility in / Miscibility with</i>	
Water:	Fully miscible.
· <i>Partition coefficient (n-octanol/water):</i> Not determined.	
· <i>Viscosity:</i>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <i>Solvent content:</i>	
Water:	>99.6 %
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal
Solids content:	>0.4 %
· <i>Other information</i>	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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 4)

- **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:**

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	25,000-50,000 mg/kg (rat)
------	------	---------------------------

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **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:** Not hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

US

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 5)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **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, IMDG, IATA | Not regulated |
| · UN proper shipping name | |
| · DOT, IATA | Not regulated |
| · IMDG | Not Regulated
Not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | Not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | Not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Not regulated |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **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):**

Water	ACTIVE
3-Methyl-2-Benzothiazolinone-Hydrazone Hydrochloride	ACTIVE
Sodium Hydroxide	ACTIVE
Hydrochloric Acid	ACTIVE

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 6)

· **Hazardous Air Pollutants**

CAS: 7647-01-0 Hydrochloric Acid

· **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)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **GHS label elements** Not Applicable

· **Hazard pictograms** Not Applicable

· **Signal word** Not Applicable

· **Hazard statements** Not Applicable

· **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:

· **Date of preparation / last revision**

Revision 0.1, 06/18/2024: Reviewed SDS for accuracy. MH/STN

06/18/2024 / 1.0

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/18/2024

Reviewed on 06/18/2024

Trade name: MBHH 0.4% w/v Solution
pH = 3.75 +- 0.05

(Contd. of page 7)

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

· * **Data compared to the previous version altered.**

US