

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2023

Reviewed on 05/12/2023

## 1 Identification

- **Product identifier**
- **Trade name:** N-Methyldiethanolamine  
50% w/w Solution
- **Article number:** MOT032
- **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](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Eye Irritation 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**



GHS07

- **Signal word** Warning
- **Hazard statements**  
Causes serious eye irritation.
- **Precautionary statements**  
Wash thoroughly after handling.  
Wear eye protection / face protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 2 | Health = 2     |
| FIRE       | 1 | Fire = 1       |
| REACTIVITY | 0 | Reactivity = 0 |

- **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: 105-59-9 | N-Methyldiethanolamine, 99% | 50.0% |
|---------------|-----------------------------|-------|

· **Table of Nonhazardous Ingredients**

|                |       |       |
|----------------|-------|-------|
| CAS: 7732-18-5 | Water | 50.0% |
|----------------|-------|-------|

### 4 First-aid measures

- **Description of first aid measures**
- **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. 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.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).

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*Dispose contaminated material as waste according to section 13.*

· **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:**

*None of the ingredients is listed.*

· **PAC-2:**

*None of the ingredients is listed.*

· **PAC-3:**

*None of the ingredients is listed.*

## 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 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:**

*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.*

*Avoid contact with the eyes and skin.*

· **Breathing equipment:** *Not required.*

· **Protection of hands:**



Protective gloves

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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

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Liquid          |
| <b>Color:</b>          | Clear           |
| <b>Odor:</b>           | Mild            |
| <b>Odor threshold:</b> | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Melting point/Melting range:</b> | Undetermined.   |
| <b>Boiling point/Boiling range:</b> | 100 °C (212 °F) |

· **Flash point:** 127 °C (260.6 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto igniting:** 265 °C (509 °F)

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not selfigniting.

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

· **Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density at 20 °C (68 °F):** 1.019 g/cm<sup>3</sup> (8.50356 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

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- |   |  |
|---|--|
| <b>· Solubility in / Miscibility with Water:</b>  | Fully miscible.                            |
| <b>· Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| <b>· Viscosity:</b>                               |  |
| <b>Dynamic:</b>                                   | Not determined.                            |
| <b>Kinematic:</b>                                 | Not determined.                            |
| <b>· Solvent content:</b>                         |  |
| <b>Water:</b>                                     | 50.0 %                                     |
| <b>VOC content:</b>                               | 0.00 %<br>0.0 g/l / 0.00 lb/gal            |
| <b>· Solids content:</b>                          | 0.0 %                                      |
| <b>· Other information</b>                        | 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:**
- **on the skin:** No irritant effect.
- **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
- **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.

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## 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.
- **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.

## 14 Transport information

|  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | Not regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | Not regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | Not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | Not regulated   |
| · <b>Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Not regulated   |

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## 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):**

N-Methyldiethanolamine, 99%

ACTIVE

Water

ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

None of the ingredients is listed.

· **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).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes serious eye irritation.

· **Precautionary statements**

Wash thoroughly after handling.

Wear eye protection / face protection.

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

Continue rinsing.

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*If eye irritation persists: Get medical advice/attention.*  
*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**

Revision 1.0 05/12/2023, reviewed SDS for accuracy. STN

Revision 0.1, 01-31-2018: updated GHS Hazardous information. Added Toxic if inhaled information. STN 05/12/2023

· **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)

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

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

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

US