# Safety Data Sheet
## acc. to OSHA HCS

Printing date 06/07/2024 Reviewed on 06/07/2024

## 1 Identification

· **Product identifier**

· **Trade name: Dichromate Solution for EZ7003 COD Analyzer**

· **Article number:** HAC059

· **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**

GHS06 Skull and crossbones

| | |
|---|---|
| Acute Toxicity - Inhalation 2 | H330 Fatal if inhaled. |

GHS08 Health hazard

| | |
|---|---|
| Sensitization - Respiratory 1 | H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Germ Cell Mutagenicity 1B | H340 May cause genetic defects. |
| Carcinogenicity 1A | H350 May cause cancer. |
| Toxic to Reproduction 1B | H360 May damage fertility or the unborn child. |
| Specific Target Organ Toxicity - Repeated Exposure 2 | H373 May cause damage to organs through prolonged or repeated exposure. |

GHS05 Corrosion

| | |
|---|---|
| Skin Corrosion 1A | H314 Causes severe skin burns and eye damage. |
| Eye Damage 1 | H318 Causes serious eye damage. |

GHS07

| | |
|---|---|
| Sensitization - Skin 1 | H317 May cause an allergic skin reaction. |

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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***Trade name: Dichromate Solution for EZ7003 COD Analyzer***

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· ***Hazard pictograms***

GHS05 GHS06 GHS08

· ***Signal word*** *Danger*

· ***Hazard-determining components of labeling:***
*Sulfuric Acid 96 - 98%*
*Mercuric Sulfate*
*Potassium Dichromate*

· ***Hazard statements***
*Fatal if inhaled.*
*Causes severe skin burns and eye damage.*
*May cause allergy or asthma symptoms or breathing difficulties if inhaled.*
*May cause an allergic skin reaction.*
*May cause genetic defects.*
*May cause cancer.*
*May damage fertility or the unborn child.*
*May cause damage to organs through prolonged or repeated exposure.*

· ***Precautionary statements***
*Obtain special instructions before use.*
*Do not handle until all safety precautions have been read and understood.*
*Do not breathe dusts or mists.*
*Wash thoroughly after handling.*
*Use only outdoors or in a well-ventilated area.*
*Contaminated work clothing must not be allowed out of the workplace.*
*Wear protective gloves/protective clothing/eye protection/face protection.*
*[In case of inadequate ventilation] wear respiratory protection.*
*If swallowed: Rinse mouth. Do NOT induce vomiting.*
*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
*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.*
*IF exposed or concerned: Get medical advice/attention.*
*Specific treatment is urgent (see on this label).*
*Get medical advice/attention if you feel unwell.*
*If skin irritation or rash occurs: Get medical advice/attention.*
*If experiencing respiratory symptoms: Call a poison center/doctor.*
*Wash contaminated clothing before reuse.*
*Store in a well-ventilated place. Keep container tightly closed.*
*Store locked up.*
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· ***Classification system:***

· ***NFPA ratings (scale 0 - 4)***


*Health = 3*
*Fire = 0*
*Reactivity = 0*

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· **HMIS-ratings (scale 0 - 4)**

| | |
|---|---|
| HEALTH *3 | Health = *3 |
| FIRE 0 | Fire = 0 |
| 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: 7664-93-9 | Sulfuric Acid 96 - 98% | 16.623% |
| CAS: 7783-35-9 | Mercuric Sulfate | 1.807% |
| CAS: 7778-50-9 | Potassium Dichromate | 0.867% |

| · **Table of Nonhazardous Ingredients** | | |
|---|---|---|
| CAS: 7732-18-5 | Water | 80.703% |

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## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:**
Supply fresh air or oxygen; call for doctor.
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**
During heating or in case of fire poisonous gases are produced.

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· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

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## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
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 section 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.
· **Protective Action Criteria for Chemicals**

| · **PAC-1:** | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | 0.20 mg/m³ |
| CAS: 7783-35-9 | Mercuric Sulfate | 0.11 mg/m³ |
| CAS: 7778-50-9 | Potassium Dichromate | 0.42 mg/m³ |

| · **PAC-2:** | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | 8.7 mg/m³ |
| CAS: 7783-35-9 | Mercuric Sulfate | 0.15 mg/m³ |
| CAS: 7778-50-9 | Potassium Dichromate | 7.4 mg/m³ |

| · **PAC-3:** | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | 160 mg/m³ |
| CAS: 7783-35-9 | Mercuric Sulfate | 41 mg/m³ |
| CAS: 7778-50-9 | Potassium Dichromate | 44 mg/m³ |

## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **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.

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## 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:** | |
|---|---|
| **CAS: 7664-93-9 Sulfuric Acid 96 - 98%** | |
| PEL | Long-term value: 1 mg/m³ |
| REL | Long-term value: 1 mg/m³ |
| TLV | Long-term value: 0.2* mg/m³<br>*as thoracic fraction, A2 |
| **CAS: 7783-35-9 Mercuric Sulfate** | |
| PEL | Long-term value: 0.1 mg/m³<br>as Hg; see OSHA standard interpretation memo |
| REL | Long-term value: 0.05* mg/m³<br>Ceiling limit value: 0.1 mg/m³<br>as Hg; *Vapor; Skin |
| TLV | Long-term value: 0.025 mg/m³<br>as Hg; A4; Skin; BEI |
| **CAS: 7778-50-9 Potassium Dichromate** | |
| PEL | Long-term value: 0.005* mg/m³<br>Ceiling limit value: 0.1** mg/m³<br>*as Cr(VI) **as CrO3; see 29 CFR 1910.1026 |
| REL | Long-term value: 0.0002 mg/m³<br>as Cr; See Pocket Guide Apps. A and C |
| TLV | Short-term value: 0.0005 mg/m³<br>Long-term value: 0.0002 mg/m³<br>as Cr(VI); A1;inhalable, Skin;BEI, DSEN, RSEN |

| · **Ingredients with biological limit values:** | |
|---|---|
| **CAS: 7783-35-9 Mercuric Sulfate** | |
| BEI | 20 µg/g creatinine<br>LD50 Intraperitoneal: urine<br>Time: prior to shift<br>LD50: Mercury |
| **CAS: 7778-50-9 Potassium Dichromate** | |
| BEI | 25 µg/L<br>LD50 Intraperitoneal: urine<br>Time: end of shift at end of workweek<br>LD50: Total chromium (fume)<br><br>10 µg/L<br>LD50 Intraperitoneal: urine<br>Time: increase during shift<br>LD50: Total chromium (fume) |

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

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***Trade name: Dichromate Solution for EZ7003 COD Analyzer***

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· ***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.*
*Store protective clothing separately.*
*Avoid contact with the eyes.*
*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*

· ***Body protection:*** *Protective work clothing*

## 9 Physical and chemical properties

· ***Information on basic physical and chemical properties***
· ***General Information***
· ***Appearance:***

| | |
|---|---|
| ***Form:*** | *Liquid* |
| ***Color:*** | *Orange* |
| · ***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)* |

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| | |
|---|---|
| · **Flash point:** | Not applicable. |
| · **Flammability (solid, gaseous):** | Not applicable. |
| · **Decomposition temperature:** | Not determined. |
| · **Ignition temperature:** | 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):** | 1.10131 g/cm³ (9.19043 lbs/gal) |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not determined. |
| · **Evaporation rate** | Not determined. |
| · **Solubility in / Miscibility with** | |
| **Water:** | Not miscible or difficult to mix. |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not determined. |
| **Kinematic:** | Not determined. |
| · **Solvent content:** | |
| **Water:** | 80.7 % |
| **VOC content:** | 0.00 %<br>0.0 g/l / 0.00 lb/gal |
| **Solids content:** | 1.9 % |
| · **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.



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## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

| · LD/LC50 values that are relevant for classification: | | |
|---|---|---|
| **ATE (Acute Toxicity Estimate)** | | |
| Oral | LD50 | 2,477 mg/kg |
| Dermal | LD50 | 34,592 mg/kg (rat) |
| Inhalative | LC50/4h | 1.87 mg/l |

· **Primary irritant effect:**
· **on the skin:** Strong caustic effect on skin and mucous membranes.
· **on the eye:**
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
· **Sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Harmful
Corrosive
Irritant
Very toxic
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
The product can cause inheritable damage.

· **Carcinogenic categories**

| · IARC (International Agency for Research on Cancer) | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | 1 |
| CAS: 7783-35-9 | Mercuric Sulfate | 3 |
| CAS: 7778-50-9 | Potassium Dichromate | 1 |

| · NTP (National Toxicology Program) | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | K |
| CAS: 7778-50-9 | Potassium Dichromate | K |

| · 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.

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· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Danger to drinking water if even small quantities leak into the ground.
· **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.

* 
## 14 Transport information

| | |
|---|---|
| · **UN-Number** | |
| · **DOT, IMDG, IATA** | UN2922 |
| · **UN proper shipping name** | |
| · **DOT** | Corrosive liquids, toxic, n.o.s. (Sulfuric Acid, Mercuric Sulfate) |
| · **IMDG, IATA** | CORROSIVE LIQUID, TOXIC, N.O.S. (Sulfuric Acid, Mercuric Sulfate) |
| · **Transport hazard class(es)** | |
| · **DOT** | |


| | |
|---|---|
| · **Class** | 8 Corrosive substances |
| · **Label** | 8, 6.1 |
| · **IMDG** | |


| | |
|---|---|
| · **Class** | 8 Corrosive substances |
| · **Label** | 8/6.1 |

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· **IATA**

| | |
|---|---|
| · **Class** | 8 Corrosive substances |
| · **Label** | 8 (6.1) |
| · **Packing group** | |
| · **DOT, IMDG, IATA** | II |
| · **Environmental hazards:** | |
| · **Marine pollutant:** | Symbol (fish and tree) |
| · **Special precautions for user** | Warning: Corrosive substances |
| · **Hazard identification number (Kemler code):** | 80 |
| · **EMS Number:** | F-A,S-B |
| · **Segregation groups** | (SGG1a) Strong acids, (SGG7) heavy metals and their salts (including their organometallic compounds), (SGG11) mercury and mercury compounds |
| · **Stowage Category** | B |
| · **Stowage Code** | SW2 Clear of living quarters. |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | |
| · **DOT** | |
| · **Quantity limitations** | On passenger aircraft/rail: 1 L<br>On cargo aircraft only: 30 L |
| · **IMDG** | |
| · **Limited quantities (LQ)** | 1L |
| · **Excepted quantities (EQ)** | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| · **UN "Model Regulation":** | UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (SULFURIC ACID, MERCURIC SULFATE), 8 (6.1), II |

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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):** | |
|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% |
| CAS: 7783-35-9 | Mercuric Sulfate |

| · **Section 313 (Specific toxic chemical listings):** | |
|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% |
| CAS: 7783-35-9 | Mercuric Sulfate |
| CAS: 7778-50-9 | Potassium Dichromate |

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| · **TSCA (Toxic Substances Control Act):** | |
|---|---|
| Water | ACTIVE |
| Sulfuric Acid 96 - 98% | ACTIVE |
| Mercuric Sulfate | ACTIVE |
| Potassium Dichromate | ACTIVE |

| · **Hazardous Air Pollutants** | |
|---|---|
| CAS: 7778-50-9 | Potassium Dichromate |

· **Proposition 65**

| · **Chemicals known to cause cancer:** | |
|---|---|
| CAS: 7778-50-9 | Potassium Dichromate |

| · **Chemicals known to cause reproductive toxicity for females:** | |
|---|---|
| CAS: 7778-50-9 | Potassium Dichromate |

| · **Chemicals known to cause reproductive toxicity for males:** | |
|---|---|
| CAS: 7778-50-9 | Potassium Dichromate |

| · **Chemicals known to cause developmental toxicity:** | |
|---|---|
| CAS: 7783-35-9 | Mercuric Sulfate |
| CAS: 7778-50-9 | Potassium Dichromate |

· **Carcinogenic categories**

| · **EPA (Environmental Protection Agency)** | | |
|---|---|---|
| CAS: 7783-35-9 | Mercuric Sulfate | D |
| CAS: 7778-50-9 | Potassium Dichromate | A(inh), D(oral), K/L(inh), CBD(oral) |

| · **TLV (Threshold Limit Value)** | | |
|---|---|---|
| CAS: 7664-93-9 | Sulfuric Acid 96 - 98% | A2 |
| CAS: 7783-35-9 | Mercuric Sulfate | A4 |
| CAS: 7778-50-9 | Potassium Dichromate | A1 |

| · **NIOSH-Ca (National Institute for Occupational Safety and Health)** | |
|---|---|
| CAS: 7778-50-9 | Potassium Dichromate |

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

GHS05 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Sulfuric Acid 96 - 98%
Mercuric Sulfate
Potassium Dichromate
· **Hazard statements**
Fatal if inhaled.
Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

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*May cause genetic defects.*
*May cause cancer.*
*May damage fertility or the unborn child.*
*May cause damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**
*Obtain special instructions before use.*
*Do not handle until all safety precautions have been read and understood.*
*Do not breathe dusts or mists.*
*Wash thoroughly after handling.*
*Use only outdoors or in a well-ventilated area.*
*Contaminated work clothing must not be allowed out of the workplace.*
*Wear protective gloves/protective clothing/eye protection/face protection.*
*[In case of inadequate ventilation] wear respiratory protection.*
*If swallowed: Rinse mouth. Do NOT induce vomiting.*
*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
*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.*
*IF exposed or concerned: Get medical advice/attention.*
*Specific treatment is urgent (see on this label).*
*Get medical advice/attention if you feel unwell.*
*If skin irritation or rash occurs: Get medical advice/attention.*
*If experiencing respiratory symptoms: Call a poison center/doctor.*
*Wash contaminated clothing before reuse.*
*Store in a well-ventilated place. Keep container tightly closed.*
*Store locked up.*
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

· **Information about limitation of use:**
*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.*

· **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 1.2, 06/05/2024: Reviewed SDS for accuracy. MH/STN*
*Revision 0.0, 05-29-2024: Creation date for SDS. STN*
*06/07/2024*
· **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)*

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*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*
*TLV: Threshold Limit Value*
*PEL: Permissible Exposure Limit*
*REL: Recommended Exposure Limit*
*BEI: Biological Exposure Limit*
*Acute Toxicity - Inhalation 2: Acute toxicity – Category 2*
*Skin Corrosion 1A: Skin corrosion/irritation – Category 1A*
*Eye Damage 1: Serious eye damage/eye irritation – Category 1*
*Sensitization - Respiratory 1: Respiratory sensitisation – Category 1*
*Sensitization - Skin 1: Skin sensitisation – Category 1*
*Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B*
*Carcinogenicity 1A: Carcinogenicity – Category 1A*
*Toxic to Reproduction 1B: Reproductive toxicity – Category 1B*
*Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2*

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