

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/28/2023

Reviewed on 12/06/2021

## 1 Identification

- **Product identifier**
- **Trade name:**
- **Article number:** 9402
- **Application of the substance / the mixture** Water treatment
- **Uses advised against**
  - Processes involving extreme heat use advised against.
  - Any use involving aerosol formation or vapour release in excess of the assigned WEL where workers are exposed without suitable RPE.
  - Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).
  - The product is intended exclusively for industrial and professional use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  
- **Information department:** Product safety department.
- **Emergency telephone number:**
  - CHEMTREC: 800-424-9300 (Domestic North America) OR 703-527-3887 (International, collect calls accepted).

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Toxic to Reproduction 1B H360 May damage fertility or the unborn child.



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, GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:**
  - Methyl-1H-benzotriazole
  - Disodium tetraborate, decahydrate
- **Hazard statements**
  - Causes serious eye irritation.
  - May damage fertility or the unborn child.
- **Precautionary statements**
  - Do not handle until all safety precautions have been read and understood.
  - Do not breathe dust.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If swallowed: Call a poison center/doctor if you feel unwell.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - IF exposed or concerned: Get medical advice/attention.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = \*2  
Fire = 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:**

29385-43-1	Methyl-1H-benzotriazole	25–50%
1303-96-4	Disodium tetraborate, decahydrate	10–25%

## 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.  
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- **Information for doctor:** Treat symptomatically and supportively.
- **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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.  
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.

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- Wear self-contained respiratory protective device.
- Wear fully protective suit.
- **Additional information**
- Cool endangered receptacles with water spray.
- Collect contaminated fire fighting water separately. It must not enter the sewage system.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- Avoid formation of dust.
- Ensure adequate ventilation
- Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
- Do not allow to penetrate the ground/soil.
- Do not allow product to reach sewage system or any water course in the undiluted form.
- Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
- Ensure adequate ventilation.
- Pick up mechanically.
- Send for recovery or disposal in suitable receptacles.
- **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:**

29385-43-1	Methyl-1H-benzotriazole	2 mg/m <sup>3</sup>
1303-96-4	Disodium tetraborate, decahydrate	6 mg/m <sup>3</sup>

- **PAC-2:**

29385-43-1	Methyl-1H-benzotriazole	22 mg/m <sup>3</sup>
1303-96-4	Disodium tetraborate, decahydrate	190 mg/m <sup>3</sup>

- **PAC-3:**

29385-43-1	Methyl-1H-benzotriazole	130 mg/m <sup>3</sup>
1303-96-4	Disodium tetraborate, decahydrate	1,100 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of dust.
- Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
- Prevent any seepage into the ground.
- No special requirements.
- **Information about storage in one common storage facility:**
- Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- **Storage class:** 6.1 C

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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 section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

#### 1303-96-4 Disodium tetraborate, decahydrate

REL Long-term value: 5 mg/m<sup>3</sup>TLV Short-term value: 6\* mg/m<sup>3</sup>Long-term value: 2\* mg/m<sup>3</sup>

\*as inhalable fraction, A4

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**  
Select PPE appropriate for the operations taking place taking into account the product properties.
- **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.  
Do not inhale dust / smoke / mist.  
Do not eat or drink while working.  
Take note of assigned Workplace Exposure Limits.  
A safe system of work must be formulated and followed to ensure that workers who may be pregnant or breastfeeding do not come into direct contact with the product.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves conforming to EN374.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
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:**



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Body protection:**



Impervious protective clothing

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Body protection must be chosen depending on product properties, activity and possible exposure.

### 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

· <b>Form:</b>	Solid
· <b>Color:</b>	Whitish
· <b>Odor:</b>	Mild
· <b>Odor threshold:</b>	Not determined.

- **pH-value at 20 °C (68 °F):** 6–7 (1%)

- **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not determined.

- **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:** Not applicable.

- **Density at 20 °C (68 °F):** 1.8 g/cm<sup>3</sup> (15.021 lbs/gal)

- **Relative density** Not determined.

- **Vapor density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

- **Water:** Soluble.

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

- **Viscosity:**

· <b>Dynamic:</b>	Not applicable.
· <b>Kinematic:</b>	Not applicable.

- **Solvent content:**

- **VOC content:** 0.00 %

- **Other information**

NOTE: The physical data presented above are typical values and should not be construed as a specification.

### 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:** Strong acids and oxidising agents

- **Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Sulfur oxides (SO<sub>x</sub>)

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Nitrogen oxides (NO<sub>x</sub>)  
Boron compounds

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### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

<b>ATE (Acute Toxicity Estimate)</b>		
Oral	LD50	2,182 mg/kg (rat)

<b>29385-43-1 Methyl-1H-benzotriazole</b>		
Oral	LD50	720 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **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:

Harmful

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.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- **Reproductive toxicity** May damage fertility or the unborn child.

### 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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

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.

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### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Recommended Hierarchy of Controls:

- Minimize waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **Uncleaned packagings:**

- **Recommendation:**

Disposal must be made according to official regulations.

Container remains hazardous when empty. Continue to observe all precautions.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**

- **DOT**

- **ADR/RID/ADN, IMDG, IATA**

Void

UN3077

- **UN proper shipping name**

- **DOT**

- **ADR/RID/ADN**

- **IMDG**

- **IATA**

Void

UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole)  
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole), MARINE POLLUTANT

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole)

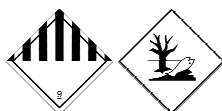
- **Transport hazard class(es)**

- **DOT**

- **Class**

Void

- **ADR/RID/ADN, IMDG, IATA**



- **Class**

9 Miscellaneous dangerous substances and articles

- **Label**

9

- **Packing group**

- **DOT**

- **ADR/RID/ADN, IMDG, IATA**

Void

III

- **Environmental hazards:**

- **Marine pollutant:**

- **Special marking (ADR/RID/ADN):**

- **Special marking (IATA):**

Symbol (fish and tree)

Symbol (fish and tree)

Symbol (fish and tree)

- **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

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· <b>Hazard identification number (Kemler code):</b> 90	
· <b>EMS Number:</b>	F-A,S-F
· <b>Stowage Category</b>	A
· <b>Stowage Code</b>	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Amounts up to 5kg or 5L per single or inner package are not regulated according to ADR/RID SP 375, IMDG 2.10.2.7 and IATA SP A197.
· <b>ADR/RID/ADN</b>	
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METHYL-1H-BENZOTRIAZOLE), 9, III

## 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 ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All components have the value 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.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

1303-96-4 | Disodium tetraborate, decahydrate

I (oral)

· **TLV (Threshold Limit Value)**

1303-96-4 | Disodium tetraborate, decahydrate

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### · 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, GHS08

#### · Signal word Danger

#### · Hazard-determining components of labeling:

Methyl-1H-benzotriazole

Disodium tetraborate, decahydrate

#### · Hazard statements

Causes serious eye irritation.

May damage fertility or the unborn child.

#### · Precautionary statements

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

Do not breathe dust.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

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

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

#### · 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.

#### · Contact:

#### · Date of preparation / last revision 06/28/2023

#### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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 &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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

Toxic to Reproduction 1B: Reproductive toxicity – Category 1B