

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/06/2021

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 or dust release in excess of the assigned workplace exposure limits where workers are exposed without suitable respiratory protective equipment (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:**

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Repr. 1B H360 May damage fertility or the unborn child.



GHS07

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** 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.

- **Classification system:**

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



Health = 2

Fire = 0

Reactivity = 0

(Contd. on page 2)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 1)

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

HEALTH	2	Health = *2
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:**

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**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:**  
DO NOT DELAY!  
Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
DO NOT DELAY!  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; immediately call for medical help.  
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:** 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.
- **Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

## 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.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 2)

- **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.
- **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:** 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:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **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:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

### 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

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 3)

- **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.
- **Breathing equipment:**  
Use suitable respiratory protective device in case of insufficient ventilation.  
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
- **Protection of hands:**



Protective gloves

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:**



Tightly sealed goggles

- **Body protection:**  
Impervious protective clothing  
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:** Not applicable.
- **Change in condition**

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

(Contd. on page 5)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 4)

· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not determined.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not applicable.
· <b>Density at 20 °C (68 °F):</b>	1.8 g/cm <sup>3</sup> (15.021 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with Water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.00 %
<b>VOC content:</b>	0.00 %
· <b>Other information</b>	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>)
  - Nitrogen oxides (NO<sub>x</sub>)
  - Boron compounds

## 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

(Contd. on page 6)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 5)

- **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:** Water hazard class 2 (Self-assessment): 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:**  
Recommended Hierarchy of Controls:
  - Minimise 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

- |  |                |
|--|----------------|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul> | Void<br>UN3077 |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> </ul>                     | Void           |

(Contd. on page 7)


# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 6)

· <b>ADR</b>	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole)
· <b>IMDG</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole), MARINE POLLUTANT
· <b>IATA</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl-1H-benzotriazole)
· <b>Transport hazard class(es)</b>	
· <b>DOT</b>	
· <b>Class</b>	Void
· <b>ADR, IMDG, IATA</b>	
	
· <b>Class</b>	9 Miscellaneous dangerous substances and articles
· <b>Label</b>	9
· <b>Packing group</b>	
· <b>DOT</b>	Void
· <b>ADR, IMDG, IATA</b>	III
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	Symbol (fish and tree)
· <b>Special marking (ADR):</b>	Symbol (fish and tree)
· <b>Special marking (IATA):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Miscellaneous dangerous substances and articles
· <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>	
· <b>ADR</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
- Sara

### · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

(Contd. on page 8)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 7)

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

None of the ingredients is listed.

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

All ingredients are listed.

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.

**· Cancerogenity categories**
**· EPA (Environmental Protection Agency)**

1303-96-4 Disodium tetraborate, decahydrate

I (oral)

**· TLV (Threshold Limit Value)**

1303-96-4 Disodium tetraborate, decahydrate

A4

**· 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** 12/06/2021 / -

**· 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

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/06/2021

Reviewed on 12/06/2021

(Contd. of page 8)

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 Irrit. 2A: Serious eye damage/eye irritation – Category 2A  
Repr. 1B: Reproductive toxicity – Category 1B

US