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1 Identification

- · Product identifier
- · Trade name:
- · Article number: 4558
- · Application of the substance / the mixture Water treatment
- · Uses advised against

Processes involving extreme heat use advised against.

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving aerosol formation or vapour release in excess of the assigned WEL where workers are exposed without suitable Respiratory Protective Equpiment.

Processes where workers who may be pregnant or breastfeeding could potentially come into direct contact with the undiluted product.

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).

The American Association of Poison Control Centers (24-hour hotline): 1-800-222-1222

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn

child.

Specific Target Organ Toxicity - Single Exposure 3 H335 May cause respiratory irritation.

- · Label elements
- · Hazard pictograms





GHS07

GHS08

- · Signal word Warning
- · Hazard-determining components of labeling:

Trisodium phosphate

Methyl-1H-benzotriazole

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

· Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P273 Avoid release to the environment.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water. P302+P352

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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



Health = 2Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 $\frac{2}{1}$ Health = 2 1 Fire = 1

- · 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: 7601-54-9	Trisodium phosphate	25 – 50%	
CAS: 29385-43-1	Methyl-1H-benzotriazole	2.5 – 10%	

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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

· For safety reasons unsuitable extinguishing agents: Water with full jet

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(Contd. of page 2)

· Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

Phosphorous oxides

· Advice for firefighters

· Protective equipment:

Do not inhale explosion gases or combustion gases.

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

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

Ensure adequate ventilation

· Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Pick up mechanically.

Ensure adequate ventilation.

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:				
CAS: 29385-43-1	Methyl-1H-benzotriazole	2 mg/m ³		
· PAC-2:				
CAS: 29385-43-1	Methyl-1H-benzotriazole	22 mg/m ³		
· PAC-3:				
CAS: 29385-43-1	Methyl-1H-benzotriazole	130 mg/m ³		

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.

Safety showers and eye wash facilities should be available at the work area.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Do not store in aluminium, copper, zinc containers.

- · Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

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- · Storage class: 11
- · 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.

At this time, the remaining constituent has no known exposure limits.

CAS: 7601-54-9 Trisodium phosphate

WEEL Short-term value: 5 mg/m³

- · 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:

Do not breathe dust

Do not eat, drink, smoke or sniff while working.

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.

Take note of assigned Workplace Exposure Limits.

Pregnant women should strictly avoid inhalation or skin contact.

· Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

· Protection of hands:



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

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 proper	rties	
v x x		
Information on basic physical and	chemical properties	
General Information		
· Appearance: Form:	Solid	
Color:	Whitish	
· Odor:	Mild	
· Odor threshold:	Not determined.	
\cdot pH-value at 20 °C (68 °F):	8 – 9 (1%)	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability:	Not determined.	
· 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:	Not applicable.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Soluble.	
· Partition coefficient (n-octanol/wat	er): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Other information	NOTE: The physical data presented above are typical values a 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 and stored according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Strong oxidising agents.

Strong acids.

· Hazardous decomposition products:

Phosphorus compounds

Carbon monoxide and carbon dioxide

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Nitrogen oxides (NOx)

(Contd. of page 5)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values	that are relevant	for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 7,200 mg/kg (rat)

CAS: 7601-54-9 Trisodium phosphate

Oral LD50 > 2,000 mg/kg (rat)

Dermal LD50 > 5,000 mg/kg (rabbit)

CAS: 29385-43-1 Methyl-1H-benzotriazole

Oral LD50 720 mg/kg (rat)
Dermal LD50 > 2,000 mg/kg (rabbit)

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

ROUTES OF EXPOSURE: Can be absorbed into the body by inhalation and by ingestion.

- · 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.

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · Specific target organ toxicity single exposure

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

· Specific target organ toxicity - repeated exposure

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

· Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

CAS: 7601-54-9 Trisodium phosphate

EC50 (96 h) > 100 mg/l (Bacteria)

- · Persistence and degradability The organic portion of the product is biodegradable.
- · Behavior in environmental systems:
- · Bioaccumulative potential Product is not expected to bioaccumulate.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Harmful to aquatic organisms

Water hazard class 2 (Self-assessment): hazardous for water

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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.

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.

- · Uncleaned packagings:
- · Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Disposal must be made according to official regulations.

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, ADN, IMDG, IATA Void
- · UN proper shipping name
- · DOT, ADR/RID/ADN, ADN, IMDG, IATA Void
- · Transport hazard class(es)
- · DOT, ADR/RID/ADN, ADN, IMDG, IATA
- · Class Void
- · Packing group
- · DOT, ADR/RID/ADN, IMDG, IATA Void
- 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.

• Transport/Additional information: Not dangerous according to the above specifications.

· UN "Model Regulation": Void

15 Regulatory information

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

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·Sara

· Section 355 (extremely hazardous substances):

CAS: 7601-54-9 Trisodium phosphate

· Section 313 (Specific toxic chemical listings):

CAS: 7601-54-9 Trisodium phosphate

· TSCA (Toxic Substances Control Act):

All ingredients are listed as 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)

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

GHS08

· Signal word Warning

· Hazard-determining components of labeling:

Trisodium phosphate

Methyl-1H-benzotriazole

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

· Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 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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· 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: Product safety department.
- · Contact:
- · Date of preparation / last revision 08/16/2024 / 3
- · 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)

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

Skin Irritation 2: Skin corrosion/irritation – Category 2

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

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.

- US