SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

- · Trade name:
- Article number: 4789
- · Registration number Mixture
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Product category PC37 Water treatment chemicals
- · Application of the substance / the mixture Water treatment
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:
- · Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

F	(Jiel)	GHS05	corrosion
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Skin Corr. 1B H314 Causes severe skin burns and eye dama	age.
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Eye Dam. 1 H318 Causes serious eye damage.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 2.2 Label elements · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. · Hazard pictograms GHS05 · Signal word Danger · Hazard-determining components of labelling: Sodium 4(or 5)-methyl-1H-benzotriazolide · Hazard statements H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects. · Precautionary statements P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment. P270 Do not eat, drink or smoke when using this product. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P391 Collect spillage.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · **vPvB:** Not applicable.

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	cterisation: Mixtures e of substances listed below with nonhazardous additions.	
· Dangerous compone	ents:	
CAS: 78620-07-2	Hydroxyphosphonoacetic acid trisodium salt Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 3794-83-0 EINECS: 223-267-7	Tetrasodium (1-hydroxyethylidene)bisphosphonate	10-25%
CAS: 64665-57-2 EINECS: 265-004-9	Sodium 4(or 5)-methyl-1H-benzotriazolide � Skin Corr. 1B, H314; � Aquatic Chronic 2, H411; � Acute Tox. 4, H302	2.5-10%
	Derivative of acrylic acid polymer Met. Corr.1, H290; O Eye Irrit. 2, H319; Aquatic Chronic 3, H412 ion: For the wording of the listed hazard phrases refer to section 16.	≤ 2.5%

SECTION 4: First aid measures

 \cdot 4.1 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:
- 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!

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

- \cdot 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- \cdot Information for doctor: Treat symptomatically and supportively.
- \cdot 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Solid product. Product will melt and combustion may occur when exposed to fire conditions.

- · 5.3 Advice for firefighters
- · Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

Wear fully protective suit.

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SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- 6.2 Environmental precautions: Do not allow to penetrate the ground/soil.
- 6.3 Methods and material for containment and cleaning up:
- Ensure adequate ventilation. Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

- 6.4 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.

SECTION 7: Handling and storage

 \cdot 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle. Prevent any seepage into the ground.
- Information about storage in one common storage facility: Store away from oxidising agents.
- \cdot Further information about storage conditions:
- Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients 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 valid during the making were used as basis.
- · 8.2 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 eat, drink, smoke or sniff while working.
- Respiratory protection: Not necessary if room is well-ventilated.
- · 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. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

\cdot 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.

\cdot 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.

SECTION 9: Physical and chemical properties

General Information Appearance:	
Form:	Solid
Colour:	Light brown
Odour:	Mild
Odour threshold:	Not determined.
pH-value (10 g/l) at 20 °C:	7-8
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	>100 °C
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	>250 °C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable.
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Soluble.
Partition coefficient (n-octanol/wat	ter): Not determined.

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Trade name:

- · Viscosity:
- Dynamic: Kinematic:

Not applicable. Not applicable. No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability

· 9.2 Other information

- \cdot Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- \cdot 10.3 Possibility of hazardous reactions No dangerous reactions known.
- \cdot 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong oxidising agents.

Reducing agents.

Strong acids.

- **10.6 Hazardous decomposition products:** Phosphorus compounds Nitrogen oxides (NOx)
- Carbon monoxide and carbon dioxide
- Metal oxides.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation
- Causes severe skin burns and eye damage.
- · Serious eye damage/irritation
- Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- 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.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability The organic portion of the product is biodegradable.
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- \cdot Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Harmful to aquatic organisms

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\cdot 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 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 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 packaging:

· Recommendation:

Disposal must be made according to official regulations.

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

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

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	tion
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Stowage Category	Not applicable. A
· 14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. · Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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) LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative LC50: Lethal concentration, 50 percent SVHC: Substances of Very High Concern Met. Corr.1: Corrosive to metals - Category 1 Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3