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

· 1.1 Product identifier

- · Trade name:
- Article number: 4598
- · 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

J.	J.≊£J	GHS05	corrosion

Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
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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 P260 Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection. P280 P273 Avoid release to the environment. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. · 2.3 Other hazards

- \cdot Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 2)

Printing date 21.05.2016

Revision: 21.05.2016

Trade name:

(Contd. of page 1)

	cterisation: Mixtures e of substances listed below with nonhazardous additions.	
Dangerous compone	ents:	
CAS: 78620-07-2	Hydroxyphosphonoacetic acid trisodium salt	10-25%
	Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 3794-83-0	Tetrasodium (1-hydroxyethylidene)bisphosphonate	10-25%
EINECS: 223-267-7	Acute Tox. 4, H302; Eye Irrit. 2, H319	
	Derivative of acrylic acid polymer	2.5-10%
	Wet. Corr.1, H290; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	
CAS: 64665-57-2	Sodium 4(or 5)-methyl-1H-benzotriazolide	2.5-10%
EINECS: 265-004-9	🔗 Skin Corr. 1B, H314; 🚯 Aquatic Chronic 2, H411; 🚯 Acute Tox. 4, H30	2

SECTION 4: First aid measures

· 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!

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.

- · 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- 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.
- Formation of toxic gases is possible during heating or in case of fire.
- · 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.
- \cdot Additional information Cool endangered receptacles with water spray.

GB

Printing date 21.05.2016

Revision: 21.05.2016

Trade name:

(Contd. of page 2)

SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation Avoid formation of dust.

Wear protective equipment. Keep unprotected persons away.

- \cdot 6.2 Environmental precautions: Do not allow to penetrate the ground/soil.
- \cdot 6.3 Methods and material for containment and cleaning up:
- Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

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

· 7.1 Precautions for safe handling

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product. Safety showers and eye wash facilities should be available at the work area. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.

- · 7.2 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 oxidising agents. Store away from foodstuffs.
- 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.
- \cdot General protective and hygienic measures:
- 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.
- Do not inhale dust / smoke / mist.
- Take note of assigned Workplace Exposure Limits.

(Contd. on page 4)

Printing date 21.05.2016

Trade name:

Revision: 21.05.2016

(Contd. of page 3)

· Respiratory protection:

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.

SECTION 9: Physical and chemical properties

 9.1 Information on 	basic physical	and chemical properties
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• (General	Information
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•	Appearance:	
	T	

· Appearance:	
Form:	Solid
Colour:	Whitish
· Odour:	Mild
· Odour threshold:	Not determined.
\cdot 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:	>93 °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.
	(Contd. on page 5

GB

Printing date 21.05.2016

Revision: 21.05.2016

Trade name:

	(Contd. of p	age 4)
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/water): Not determined.		
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
• 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications. To avoid thermal decomposition do not overheat.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Strong acids and oxidising agents
- **10.6 Hazardous decomposition products:** Nitrogen oxides (NOx) Carbon monoxide and carbon dioxide Sulphur oxides (SOx) Phosphorus compounds

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- \cdot Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- \cdot 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.
- · Additional toxicological information:

ROUTES OF EXPOSURE: The component substances can variously be absorbed into the body by inhalation and by ingestion.

- · 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.
- \cdot 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.
- \cdot 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.

(Contd. on page 6)

Printing date 21.05.2016

Revision: 21.05.2016

Trade name:

(Contd. of page 5)

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
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · 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).
- Contact waste processors for recycling information.

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

· European waste catalogue

Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

· Uncleaned packaging:

· Recommendation:

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.

 \cdot Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN-Number		
ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name		
ADR, ADN, IMDG, IATA	Void	

Printing date 21.05.2016

Revision: 21.05.2016

Trade name:

	(Contd. of page 6)
· 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	Not applicable.
· 14.7 Transport in bulk according to Ann	nex II of
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

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) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative 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