SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. **Product identifier:**
Genezis NP, PK, NPK, N+S fertiliser + micronutrients

1.2. **Relevant identified uses of the mixture and uses advised against:**
Solid, compound fertilizer mixture with nitrogen-phosphorus-potassium content. With micronutrients. With B, Cu, Fe, Mn, Zn.
EC-Fertiliser for industrial and consumer use.

Sectors of use:
SU1 – Agriculture, forestry, fishery

Chemical Products Categories:
PC12 – Fertilizers

1.3. **Details of the supplier of the safety data sheet:**

Information about the manufacturer:
Bige Holding Kft.
5007 Szolnok, Tószegi út 51.
Hungary
Tel: +36 56 505 876

1.3.1. Responsible person: -
E-mail: titkarsag@bigeholdingkft.hu

1.4. **Emergency telephone number:** *Please fill in*

SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the mixture:**

Classification according to Regulation (EC) No 1272/2008 (CLP):
Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412

Hazard statements:
H412 – Harmful to aquatic life with long lasting effects.

2.2. **Label elements:**

Hazard statements:
H412 – Harmful to aquatic life with long lasting effects.

Precautionary statements:
P501 – Dispose of contents/container in accordance with international regulations.

Fertiliser, when labelling/packing Regulation (EU) No. 2003/2003 of 13 October 2003 relating to fertilisers should be followed.

2.3. **Other hazards:**
The product has no other known specific hazards for human or environment.
The components do not meet the criteria for PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances:**
Not applicable.

3.2. **Mixtures:**
Description: The product is a mixture of inorganic salts.

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
Ammonium sulphate*	7783-20-2	231-984-1	-	<82.5	-	not classified	-
Diammonium hydrogen-orthophosphate*	7783-28-0	231-987-8	-	<65.5	-	not classified	-
Ammonium dihydrogen-orthophosphate*	7722-76-1	231-764-5	-	<54	-	not classified	-
Potassium chloride*	7447-40-7	231-211-8	-	<53.5	-	not classified	-
Dolomite*	16389-88-1	240-440-2	-	<37	-	not classified	-
Urea*	57-13-6	240-440-2	-	<18	-	not classified	-
Iron (II) sulfate Index number: 026-003-00-7	7720-78-7	231-753-5	-	<5	GHS07 Warning	Acute Tox. 4 Eye Irrit. 2 Skin Irrit. 2	H302 H319 H315
Boric acid; Boric acid, crude natural Index number: 005-007-00-2	10043-35-3 11113-50-1	233-139-2 234-343-4	-	<0.6	GHS08 Danger	Repr. 1B	H360FD
Manganese sulphate** Index number: 025-003-00-4	7785-87-7	232-089-9	-	<0.6	GHS08 GHS09 Warning	STOT RE 2 Aquatic Chronic 2	H373 H411
Copper sulphate** Index number: 029-004-00-0	7758-98-7	231-847-6	-	<0.6	GHS07 GHS09 Warning	Acute Tox. 4 Eye Irrit. 2 Skin Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H319 H315 H400 H410
Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate); Zinc sulphate (anhydrous) Index number: 030-006-00-9	7446-19-7 7733-02-0	231-793-3 231-793-3	-	<0.2	GHS05 GHS07 GHS09 Danger	Acute Tox. 4 Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic 1	H302 H318 H400 H410

*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No 1272/2008.
**: Substance having occupational exposure limit value.

Specific concentration limits:
Boric acid (CAS: 10043-35-3; 11113-50-1):
Repr. 1B; H360FD: C ≥ 5,5 %

For the full text of hazard statements, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures:**

General information: If you feel unwell, seek medical advice. Show the label.

Decomposition products after heating: ammoniac, nitrogen-oxides, phosphorus oxides, sulphur oxides, hydrochloric acid.

INGESTION:

Measures:

- Do NOT induce vomiting.
- If swallowed: call a doctor.

INHALATION:

Measures:

- Take the victim into fresh air and let him rest.
- Call poison centre or doctor/physician if you feel unwell.

SKIN CONTACT:

Measures:

- Remove the contaminated clothes.
- Wash the skin with mild soap and water then rinse with warm water.
- Wash contaminated clothing before re-use.
- If skin irritation occurs: Get medical advice/attention.

EYE CONTACT:

Measures:

- In case of contact with eyes flush with water holding eyelids apart (for at least 15 minutes).
- Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

4.2. **Most important symptoms and effects, both acute and delayed:**

Inhalation: May cause drowsiness or dizziness.

Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

Ingestion: May cause drowsiness, headache.

4.3. **Indication of any immediate medical attention and special treatment needed:**

Treat symptomatically. Show the label of the product or this Safety Data Sheet to the doctor.

SECTION 5: FIREFIGHTING MEASURES

5.1. **Extinguishing media:**

5.1.1. **Suitable extinguishing media:**

Dry powder extinguishers, carbon dioxide, foam, sand, water spray, depending on the surrounding fire.

5.1.2. **Unsuitable extinguishing media:**

Water jet.

5.2. **Special hazards arising from the substance or mixture:**

Decomposition products after heating: ammoniac, nitrogen-oxides, phosphorus oxides, sulphur oxides, hydrochloric acid.

5.3. **Advice for firefighters:**

Special protective equipment for firefighters: boots, overalls, gloves, eye and face protection (EN 469). Self-contained breathing apparatus (SCBA) with chemical resistant gloves (EN 133).

Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

Use water spray to keep fire-exposed containers cool.

Prevent use of contaminated buildings, area and equipment until they are decontaminated.

Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff

The contaminated extinguishing water should be collected separately, do not discharge it into the sewer system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures:**

6.1.1. **For non-emergency personnel:**

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. **For emergency responders:**

Evacuate the danger area.

Provide adequate general and local exhaust ventilation.

Use personal protective equipment as required. See Section 8.

6.2. **Environmental precautions:**
Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. **Methods and material for containment and cleaning up:**
Avoid inhalation of the product, in contact with skin and eyes. Enclose the leaked product. Hold the product in dry conditions, if possible. During disposal leak, wear full personal protective equipment. If the product is dry, avoid creating dust during cleaning. Do not sweep the product.
Use a vacuum cleaner (Industrial portable devices equipped with high efficiency particulate filter (HEPA filter) or similar devices). Remove spilled product with mop, wet brush or spray the fragmented water currents (fine mist to avoid creating dust) and pick up the wet mixture.
Take the moist product in a waterproof container. Allow the product prior to disposal to dry and harden. Dispose the wet and dry product in accordance with the applicable laws and local regulations.

6.4. **Reference to other sections:**
For further and detailed information see Sections 7, 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. **Precautions for safe handling:**
Observe conventional hygiene precautions.
Wash hands thoroughly after handling.
Technical measures:
Keep container tightly closed.
Avoid creating dust.
Precautions against fire and explosion:
No special measures required.

7.2. **Conditions for safe storage, including any incompatibilities:**
Technical measures and storage condition:
Store the product in a well-ventilated area.
Keep container tightly closed.
Keep away from children.
Do not store food, beverages or tobacco products in the storage area.
Storage temperature: <35 °C.
Incompatible materials: See Section 10.5
Packaging material: Keep in original container, PP, PE.

7.3. **Specific end use(s):**
PC12 – Fertilizers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Occupational exposure limit values (Commission Directive (EC) No 2000/39 of 8 June 2000):
The components of the mixture are not regulated with exposure limit value.

Hungary (Decree 5/2020. (II. 6.) ITM on the protection of the health and safety of workers exposed to chemical agents):
Manganese and its inorganic salts (calculated for Mn) (CAS: 7439-96-5): ÁK value: 0.2 mg / m³; inhalable; 0.05 mg / m³
Copper and its compounds (calculated for Cu) (CAS: 7440-50-8): ÁK value: 0.1 mg / m³; CK value: 0.2 mg / m³

Permissible concentrations of particulate matter in mg / m³:
Other inert dust: ÁK value, inhalable concentration: 10 mg / m³; CK value, respirable concentration: 6 mg / m³

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values		
Compartment	Value	Note(s)
Freshwater	no data	no notes
Marine water	no data	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	no data	no notes
Intermittent release	no data	no notes
Secondary poisoning	no data	no notes
Soil	no data	no notes

8.2. **Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. **Appropriate engineering controls:**

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.
Employ good industrial hygiene practice. Provide adequate general and local exhaust ventilation.
Use only outdoors or in a well-ventilated area. If needed, use local exhaust ventilation.

8.2.2. **Individual protection measures, such as personal protective equipment:**

Avoid breathing dust.
Remove/Take off all contaminated clothing.
Rinse skin with water/shower.
Wash the contaminated clothing before reuse.
Wash hands, forearms and face thoroughly after handling the product, before eating, smoking and using the lavatory and at the end of the working period.
Use personal protective equipment as required.

1. **Eye/face protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure of dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles (EN 166).
2. **Skin protection:**
    a. **Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling this product if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material might be different for different glove manufacturers (EN 374).
    b. **Other:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
3. **Respiratory protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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 the concentration is exceeded, use filter type P1 or FFP1 (dust).
4. **Thermal hazards:** No thermal hazards known.

8.2.3. **Environmental exposure controls:**

Prevent the spread in the environment and enter drains and watercourses.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. **Information on basic physical and chemical properties:**

Parameter	Value / Test method / Remarks
1. **Appearance:**	**off-white to pink solid**
2. **Odour:**	**odourless**
3. Odour threshold:	no data*
4. pH:	5 – 7

5.	Melting point/freezing point:	>130 °C
6.	Initial boiling point and boiling range:	not applicable (decomposes before boiling)
7.	Flash point:	not applicable
8.	Evaporation rate:	no data*
9.	Flammability (solid, gas):	no data*
10.	Upper/lower flammability or explosive limits:	no data*
11.	Vapour pressure:	no data*
12.	Vapour density:	not applicable
13.	Relative density:	no data*
14.	Solubility(ies):	depends on the components
15.	Partition coefficient: n-octanol/water:	not applicable
16.	Auto-ignition temperature:	does not ignite
17.	Decomposition temperature:	>155 °C
18.	Viscosity:	not applicable
19.	Explosive properties:	no data*
20.	Oxidizing properties:	no data*

9.2. **Other information:**
Density at 20 °C: 1.5 – 2.5 g/cm³
Bulk density: 800 – 1000 kg/m³
*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:**
Under storage at normal ambient temperatures the product is stable.
Reacts with acids and bases.

10.2. **Chemical stability:**
Under storage at normal ambient temperatures the product is stable.

10.3. **Possibility of hazardous reactions:**
No hazardous reactions known when handled and stored according to provisions.

10.4. **Conditions to avoid:**
Extremely high or low temperatures, moisture.

10.5. **Incompatible materials:**
With bases forms ammoniac, with acids forms in high temperature hydrochloric acid.

10.6. **Hazardous decomposition products:**
Decomposition products after heating: ammoniac, nitrogen-oxides, phosphorus oxides, sulphur oxides, hydrochloric acid.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on toxicological effects:**
Acute toxicity: Based on available data, the classification criteria are not met.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
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.

11.1.1. **Summaries of the information derived from the test conducted:**
No data available.

11.1.2. **Relevant toxicological properties:**
No data available about the product.
Information about the components:
Ammonium sulphate (CAS: 7783-20-2):
LD50 (oral, rat): 4250 mg/kg bw
LD50 (dermal, rat): >2000 mg/kg bw

Diammonium hydrogen-orthophosphate (CAS: 7783-28-0):
LD50 (oral, rat): >2000 mg/kg bw
LC50 (inhalation, rat): >5 mg/l air/4 h
LD50 (dermal, rat): >5000 mg/kg bw
Ammonium dihydrogen-orthophosphate (CAS: 7722-76-1):
LD50 (oral, rat): >2000 mg/kg bw
LC50 (inhalation, rat): >5 mg/l air/4 h
LD50 (dermal, rat): >5000 mg/kg bw
Potassium chloride (CAS: 7447-40-7):
LC50 (oral, rat): ca. 3020 mg/kg bw
Urea (CAS: 57-13-6):
LDLo (oral, cattle): 600 mg/kg bw
Iron (II) sulfate (CAS: 7720-78-7):
LD50 (oral, rat): 500mg/kg bw
LC50 (inhalation, rat): 1 mg/m³ air/40 h
LD50 (dermal, rat): >2000 mg/kg bw
Boric acid (CAS: 10043-35-3; 11113-50-1):
LD50 (oral, rat): 3450 mg/kg bw
LC50 (inhalation, rat): >2.03 mg/l air/5 h
LD50 (dermal, rat): >2000 mg/kg bw
Manganese sulphate (CAS: 7785-87-7):
LD50 (oral, rat): 2150mg/kg bw
LC50 (inhalation, rat): >4.45 mg/l air/4 h
Copper sulphate (CAS: 7758-98-7):
LD50 (oral, rat): 482 mg/kg bw
LD50 (dermal, rat): >2000 mg/kg bw

11.1.3. Information on likely routes of exposure:
Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:
No data available.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Based on our experiences and the available information, in case of proper use and handling, no adverse effects on health can be expected.

11.1.6. Interactive effects:
No data available.

11.1.7. Absence of specific data:
No information.

11.1.8. Other information:
No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. <u>**Toxicity:**</u>
Harmful to aquatic life with long lasting effects.
Information about the components:
Ammonium sulphate (CAS: 7783-20-2):
LC50 (Oncorhynchus mykiss): 53 mg/l/96 h
EC10 (Lepomis macrochirus): 5.29 mg/l/30 d
EC50 (Ceriodaphnia acanthina) : 121.4 mg/l/48 h
EC10 (Hyalella azteca): 3.12 mg/l/10 w
Diammonium hydrogen-orthophosphate (CAS: 7783-28-0):
LC50 (Oncorhynchus mykiss): >100 mg/l/96 h
LC50 (Daphnia carinata): 1790 mg/l/72 h
Ammonium dihydrogen-orthophosphate (CAS: 7722-76-1):
LC50 (Oncorhynchus mykiss): >100 mg/l/96 h
LC50 (Daphnia carinata): 1790 mg/l/72 h
Potassium chloride (CAS: 7447-40-7):
LC50 (Pimephales promelas): 880 mg/l/96 h
NOEC (Pimephales promelas): 500 mg/l/7 d
EC50 (Dreissena polymorpha): 147 mg/l/48 h
Urea (CAS: 57-13-6):
LC50 (Leuciscus idus melanotus): >10 000 mg/l/48 h
NOEC (Gambusia affinis): 200 mg/l/1 w

EC50 (Daphnia magna): >10 000 mg/l/24 h
Boric acid (CAS: 10043-35-3; 11113-50-1):
LC50 (Pimephales promelas): 79.7 mg/l/96 h
NOEC (Pimephales promelas): 11.2 mg/l/32 d
LC50 (Lampsilis siliquoidea): 137 mg/l/96 h
NOEC (Hyalella azteca): 25.9 mg/l/42 d
Manganese sulphate (CAS: 7785-87-7):
LC50 (Salmo trutta): 49.9 mg/l/96 h
NOEC (Danio rerio): 4496.89 µg/l/35 d
LC50 (Hyalella azteca): 3 mg Mn/l/96 h
LC50 (Daphnia magna): 5700 µg/l/3 w
Copper sulphate (CAS: 7758-98-7):
LC50 (Pimephales promelas): 193 µg/l/96 h
NOEC (Atherinops affinis): 123 µg/l/12 d
LC50 (Daphnia magna): 7 µg/l/48 h
NOEC (Penaeus mergulensis): 33 µg/l/14 d

12.2. **Persistence and degradability:**
The plants and other creatures use the compounds as available nutrients. The remaining compounds increase the permanent nutrients of the soil.
No known significant effects or critical hazards.

12.3. **Bioaccumulation potential:**
The bioaccumulative potential of the components is low. No known significant effects or critical hazards.

12.4. **Mobility in soil:**
Nitrate ions are mobile in the soil.

12.5. **Results of PBT and vPvB assessment:**
The components do not meet the criteria for PBT or vPvB substances.

12.6. **Other adverse effects:**
Product should not get in high quantities into wastewater because it may act as a plant nutrient and cause eutrophication.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods:**
Disposal according to the local regulations.

13.1.1. **Information regarding the disposal of the product:**
Dispose of in accordance with applicable regulations.
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
List of Waste Code:
06 10 99 wastes not otherwise specified

13.1.2. **Information regarding the disposal of the packaging:**
Dispose of in accordance with applicable regulations.
Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

13.1.3. **Physical/chemical properties that may affect waste treatment options shall be specified:**
No data available.

13.1.4. **Sewage disposal:**
No data available.

13.1.5. **Special precautions for any recommended waste treatment:**
No data available.

SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:
Not subject to the conventions of carriage of dangerous goods.

14.1. **UN Number:**
No UN Number.

14.2. **UN proper shipping name:**
No proper shipping name.

14.3. **Transport hazard class(es):**

No transport hazard classes.

14.4. **Packing group:**
No packing group.

14.5. **Environmental hazards:**
Harmful to aquatic life with long lasting effects.

14.6. **Special precautions for user:**
No relevant information available.

14.7. **Transport in bulk according to Annex II of MARPOL and the IBC Code:**
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture:**

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers

Contains substances that are listed on the Candidate List for Authorization of Substances of Very High Concern (SVHC) in accordance with Regulation (EC) No 1907/2006 (REACH):
Boric acid (CAS: 10043-35-3)
Boric acid, crude natural (CAS: 11113-50-1)

The mixture contains substances listed in Annex XVII of Regulation (EC) No 1907/2006 and therefore fall under restriction:
The conditions of restriction:
Entry 30 - Substances which are classified as reproductive toxicant:
Boric acid (CAS: 10043-35-3)
Boric acid, crude natural (CAS: 11113-50-1)

15.2. **Chemical safety assessment:** No chemical safety assessment has been carried out for this mixture by the supplier.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:
General revision according to Regulation (EU) 2015/830 (Section 1-16).
The composition and hazard classification of the mixture did not change compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

Literature references / data sources:
Previous version of the safety data sheet (17. 05. 2017, version 1.0).

Methods used for the classification according to Regulation (EC) No 1272/2008:

Classification	Method
Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412	Based on calculation method

Relevant hazard statements (code and full text) of Sections 2 and 3:
H302 – Harmful if swallowed.
H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H319 – Causes serious eye irritation.
H360FD – May damage fertility. May damage the unborn child.
H373 – May cause damage to organs <*or state all organs affected, if known*> through prolonged or repeated exposure <*state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard*>.
H400 – Very toxic to aquatic life.
H410 – Very toxic to aquatic life with long lasting effects.
H411 – Toxic to aquatic life with long lasting effects.
H412 – Harmful to aquatic life with long lasting effects.

Training advice: No data available.

Full text of the abbreviations in the safety data sheet:
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
AOX: Adsorbable organic halides.
BCF: Bioconcentration factor.
BOD: Biological Oxygen Demand.
CAS number: Chemical Abstract Service number.
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.
COD: Chemical Oxygen Demand.
CSA: Chemical Safety Assessment.
CSR: Chemical Safety Report.
DNEL: Derived-No-Effect-Level.
ECHA: European Chemical Agency.
EC: European Community.
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).
EEC: European Economic Community.
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European Norm.
EU: European Union.
EWC: European Waste Catalogue (replaced by LoW – see below).
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
IMSBC: International Maritime Solid Bulk Cargoes.
IUCLID: International Uniform Chemical Information Database.
IUPAC: International Union of Pure and Applied Chemistry.
Kow: n-Octanol - Water Partition Coefficient.
LC50: Lethal concentration resulting in 50 % mortality.
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).
LoW: List of Waste.
LOEC: Lowest Observed Effect Concentration.
LOEL: Lowest Observed Effect Level.
NOEC: No Observed Effect Concentration.
NOEL: No Observed Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
OECD: Organization for Economic Cooperation and Development.
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic.
PNEC: Predicted No Effect Concentration.
QSAR: Quantitative Structure Activity Relationship.
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
SCBA: Self Contained Breathing Apparatus.
SDS: Safety Data Sheet.
STOT: Specific Target Organ Toxicity.
SVHC: Substances of Very High Concern.
UN: United Nations.
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.
VOC: Volatile Organic Compound.
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.
The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.
The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.
Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.
It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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