

Safety Data Sheet	
According to EC Regulation 1907/2006	
Date of creation:	16.04.2008
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Version:	3.0



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

**1.1 Product identifier**

Trade name

**MIKROCHELAT Zn-15**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Production of the substance. Industrial use: intermediate in the synthesis of chemical products, component of mixtures (including: packaging and distribution), an auxiliary agent in the chemical industry (including: as a laboratory reagent). Professional uses: fertiliser, in the building sector. Consumer uses: component of fertilisers and other consumer products. Use not recommended: other than listed above.

Unknown.

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

Name: Intermag Sp. z o.o.

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**1.4 Emergency telephone number: 112**

**SECTION 2: Hazard identification**

**2.1 Classification of the substance or mixture**

Not classified as hazardous.

**2.2 Label elements**

Hazard pictograms

Not applicable.

Signal word

Not applicable.

Hazard statements (H)

Not applicable.

Precautionary statements (P)

Not applicable.

**2.3 Other hazards**

The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII.

**SECTION 3: Composition/information on ingredients**

**3.1 Substance**

Name	Index number	CAS	EC	% by weight min, 80	Classification	Registration number
Enylenediaminetetraacetic acid disodium zinc salt	None	14025-21-9	237-865-0		None	01-2119696942-27-0005

If dangerous constituents are mentioned, the meaning of H phrases is given in clause 16 of the safety data sheet.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

If health problems or doubts occur, always seek medical advice and show information given in this SDS.

Inhalation

Stop working and move to fresh air. In case of loss of consciousness maintain airways patency, if breathing is difficult, seek medical advice.

Skin contact

In case of skin contact take off contaminated clothing, wash the affected skin with water and soap. Wash the contaminated clothing before next use. In case of skin irritation seek medical advice.

Eye contact

If the victim wears contact lenses, they should be removed before washing. In case of eye contact, rinse the eyes immediately with plenty of water for at least 15 min keeping the lids wide open. In case of irritation seek oculist advice.

Ingestion

Rinse mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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

No data available.

**4.3 Indication of any immediate medical attention and specific treatment needed**

Decision on suitable treatment should be made by the doctor after assessing the condition of the affected person.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

CO<sub>2</sub>, foams, water spray and other extinguishing media suitable for materials on fire in the vicinity of the product. Unsuitable extinguishing media: dense water stream.

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

Non-flammable under normal conditions. Products of decomposition and combustion may be toxic (carbon oxides, nitrogen oxides).

**5.3 Advice for firefighters**

Use protective breathing equipment and full protective clothing. Fire residues should be disposed of in accordance to local regulations. Don't allow the contaminated water to be released to underground and surface water.

**SECTION 6: Accidental release measures**

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

Inform about the accident; remove from danger zone all persons not involved in the liquidation of accident. Order the evacuation if necessary. Avoid direct and long-term contact with released mixture. Avoid creating and inhaling vapor/mist. In the event of release in a closed space ensure effective ventilation. Use personal protective equipment (respirator with filter type A, protective gloves made of rubber or neoprene, protective goggles or tight-fitting goggles, protective clothing).

**6.2 Environmental precautions**

Prevent the entry of fertiliser into sewage system, groundwater and surface water and soil.

**6.3 Methods and material for containment and cleaning up**

Collect the spilled product in a dry form to the marked and tightly sealed container. Wash out the remains with water. Collect washings and use for fertilizing or for disposal.

**6.4 Reference to other sections**

Personal protective equipment is specified in Section 8. Dispose of in accordance with the recommendations set out in Section 13.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Keep out of the reach of children. Don't ingest – in case of ingestion, seek medical advice. Observe the rules of hygiene. Avoid creation and inhalation of dust. Avoid skin and eye contact. In case of eye contact- rinse with plenty of water, and seek medical advice. Wear dust mask, goggles, gloves and protective clothing.

**7.2 Conditions for safe storage, including any incompatibilities**

The product is hygroscopic – store in original, tightly closed containers, in a cool, well-ventilated room. Prevent the containers from direct influence of weather conditions.

**7.3 Specific end use(s)**

Fertilizer.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**EMPLOYEES**

DNEL/DWEL through the skin

62500 mg/kg body mass /day

DNEL/DWEL through inhalation

30 mg/m3

**CONSUMERS**

DNEL/DWEL through the skin

31250 mg/kg body mass/day

DNEL/DWEL through inhalation

7.5 mg/m3

DNEL/DWEL ingestion

6.25 mg/kg body mass/day

PNEC for the freshwater environment

2.97 mg/L

PNEC for the marine environment

0.3 mg/L

PNEC for water environment (temporary release)

1.1 mg/L

PNEC STP

66 mg/L

PNEC for sediment environment (freshwater)

It is not expected.

PNEC for sediment environment (seawater)

It is not expected.

PNEC for air

No data available.

PNEC for soil environment

0.21 mg/kg dry soil weight

Note: When the concentration of the substance is known, the selection of personal protective equipment should be made taking into account the concentration of the substance present in the workplace, exposure time and the activities performed by the employee. In an emergency, if the concentration of the substance in the workplace is not known, use personal protection measures recommended for the highest protection class. The employer is obliged to ensure that the used personal protective equipment, clothing and shoes have protective and functional properties and ensure their proper cleaning, maintenance, repair and decontamination.

**8.2 Exposure control**

**8.2.1 Appropriate engineering controls**

General ventilation.

**8.2.2 Personal protection measures such as individual protection equipment**

**8.2.2.1 Eye/face protection**

Tight fitting goggles.

**8.2.2.2 Skin protection**

Protection of hands

Protective gloves with a penetration time ≥ 8 hours, e.g. nitrile rubber (thickness 0.35 mm) or polyvinyl chloride (thickness 0.5 mm).

Other

Protective clothing.

**8.2.2.3 Respiratory protection**

Under normal conditions with proper ventilation is not necessary. Otherwise - use a dust mask.

**8.2.2.4 Thermal hazards**

Not required.

**8.2.3 Environmental exposure controls**

Prevent entering a large amount of product to the environment.

**SECTION 9: Physical and chemical properties**

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

Form

Solid, white.

Odour

Almost without odour.

Odour threshold

No data available.

pH

6.3 ± 0.5 (1% solution at 20°C)

Melting/freezing point

None, decomposition at 263°C.

Initial boiling point and boiling range

None, decomposition at 263°C.

Flash point

Not applicable, solid.

Evaporation rate

Not applicable, non-volatile substance.

Flammability (solid, gas)

The substance is not flammable.

Upper Explosive Limit

Not applicable.

Lower Explosive Limit

Not applicable.

Vapor pressure

Not applicable, non-volatile substance.

Vapor density

Not applicable, non-volatile substance.

Bulk density

650 ± 50 kg/m3 (at 20°C)

<p><b>SDS MIKROCHELAT Zn-15</b></p> <p>Page 5 of 9</p> <p>INTERMAG</p>	<p>Solubility in water</p> <p>Ca. 900 g/L</p> <p>Partition coefficient: n-octanol/water</p> <p>log Kow (Pow): -10.32</p> <p>Auto-ignition temperature</p> <p>315°C at 1013 hPa</p> <p>Decomposition temperature</p> <p>No data available.</p> <p>Viscosity</p> <p>Not applicable, solid.</p> <p>Explosive properties</p> <p>The mixture is not explosive.</p> <p>Oxidizing properties</p> <p>The mixture is not oxidizing.</p> <p>9.2 <u>Other data</u></p> <p>None</p>
	<p><b>SECTION 10: Stability and reactivity</b></p> <p>10.1 <u>Reactivity</u></p> <p>The product is not reactive under normal conditions.</p> <p>10.2 <u>Chemical stability</u></p> <p>No reactivity under normal storage conditions.</p> <p>10.3 <u>Possibility of hazardous reactions</u></p> <p>They are not expected under normal storage conditions.</p> <p>10.4 <u>Conditions to avoid</u></p> <p>High temperature.</p> <p>10.5 <u>Incompatible materials</u></p> <p>Avoid contact with the aluminum and copper under conditions of high humidity/water.</p> <p>10.6 <u>Hazardous decomposition products</u></p> <p>Under normal use conditions no hazardous decomposition products. Under the influence of high temperature decomposes with emission of harmful carbon oxides and nitrogen oxides.</p>
	<p><b>SECTION 11: Toxicological information</b></p> <p>11.1 <u>Information on toxicological effects</u></p> <p>11.1.1 <u>Acute toxicity</u></p> <p>Based on the available data the classification criteria are not met.</p> <p>LD50 rat, oral: &gt;2000 mg/kg (OECD 423)</p> <p>LD50 rat, inhalation: &gt; 5.16 mg/L/4h (OECD 436, substance tested: Cu EDTA 2Na)</p> <p>LC50 rat, skin: &gt;2000 mg/kg (OECD 402, substance tested: Fe EDTA NH4).</p> <p>11.1.2 <u>Skin corrosion/irritation</u></p> <p>Based on the available data the classification criteria are not met. The tests conducted in accordance with the OECD Guidelines No 439 showed no irritation to the skin.</p> <p>11.1.3 <u>Serious eye damage/irritation</u></p> <p>Based on the available data the classification criteria are not met. The tests conducted in accordance with the OECD Guidelines No 437 showed no serious eye irritation.</p> <p>11.1.4 <u>Respiratory or skin sensitization</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p>

<p><b>SDS MIKROCHELAT Zn-15</b></p> <p>Page 6 of 9</p> <p>INTERMAG</p>	<p>11.1.5 <u>Germ cell mutagenicity</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p> <p>11.1.6 <u>Carcinogenicity</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p> <p>11.1.7 <u>Reproductive toxicity</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p> <p>11.1.8 <u>STOT-single exposure</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p> <p>11.1.9 <u>STOI-repeated exposure</u></p> <p>Based on the available data the classification criteria are not met. The tests have not been conducted for the substance, assessment was conducted on the basis of transferring data for substances with similar chemical structure.</p> <p>11.1.10 <u>Aspiration hazard</u></p> <p>Based on the available data the classification criteria are not met.</p> <p>11.1.11 <u>Other information</u></p> <p>None</p>
	<p><b>SECTION 12: Ecological information</b></p> <p>12.1 <u>Toxicity</u></p> <p>Based on the available data the classification criteria are not met.</p> <p>LC50, 96 h, fish Bluegill fish: 685 mg/L</p> <p>EC50, invertebrates: 110 mg/L (calculation based on test results for similar substance)%)</p> <p>EC50, algae: 667 mg/L (calculation based on test results for similar substance).</p> <p>12.2 <u>Persistence and degradability</u></p> <p>The substance is not hydrolyzed and is not easily biodegradable. Easy biodegradation is only possible with the use of isolated strains of bacteria. Biodegradation in the soil depends on the soil type and pH.</p> <p>12.3 <u>Bioaccumulative potential</u></p> <p>Based on an estimated log Koc = 1, and on the results of bioconcentration factor (BCF 1.1-1.8) on fish using radioabeled EDTA, it can be concluded that the substance has a low potential for bioaccumulation.</p> <p>12.4 <u>Mobility in soil</u></p> <p>Due to the high water solubility and low potential for adsorption, the substance does not accumulate in the soil and is washed into surface waters and groundwater. Due to changes in the pH of surface waters and the combined processes of photodegradation and biodegradation of all salts of EDTA eventually disappear in surface waters.</p> <p>12.5 <u>Results of PBT and vPvB assessment</u></p> <p>Does not meet the criteria of PBT and vPvB (Log Kow ≤ 4.5).</p> <p>12.6 <u>Other adverse effects</u></p> <p>Don't allow the product to be released in a large amount to sewage system and underground and surface water.</p>



<p><b>SECTION 13: Disposal considerations</b></p> <p>13.1 <u>Waste treatment methods</u></p> <p>Do not dispose together with municipal solid waste. Prevent the product from being released into sewage system and underground and surface water. Do not dispose in landfill sites. Consider the possibility of utilization. Dispose/recycle the product and the package according to the local regulations concerning environmental protection. Only completely emptied packages may be recycled. Do not mix with other waste.</p>	<p><u>Changes</u></p> <p>Adjustment of SDS to the requirements of the Commission Regulation EC 2015/830 and complement of the data arising from the full registration of substance. All sections of the sheet were subjected to changes.</p> <p>Hints concerning training</p> <p>Train in accordance with valid regulations: safety and health regulations, fire regulations, regulations of packaging, waste regulations especially taking into account health protection, safety and environmental protection.</p>
<p><b>SECTION 14: Transport information</b></p> <p>14.1 <u>UN number</u></p> <p>None</p>	<p><u>H-Statements</u></p> <p>None</p>
<p>14.2 <u>UN proper shipping name</u></p> <p>Not subject to.</p> <p>14.3 <u>Transport hazard class(es)</u></p> <p>Not subject to.</p> <p>14.4 <u>Packing group</u></p> <p>None</p> <p>14.5 <u>Environmental hazards</u></p> <p>Does not pose a threat to the environment.</p> <p>14.6 <u>Special precautions for users</u></p> <p>Not applicable.</p> <p>14.7 <u>Transport in bulk according to Annex II of Marpol and the IBC Code</u></p> <p>Not subject to.</p>	<p><u>Explanation of acronyms and abbreviations</u></p> <p>Met. Corr. – Substance or mixture corrosive to metals</p> <p>Acute Tox. – Acute toxicity</p> <p>Skin Corr. – Skin corrosion</p> <p>Skin Irrit. – Skin irritation</p> <p>Eye Dam. – Serious eye damage</p> <p>Eye Irrit. – Serious eye irritation</p> <p>Resp. Sens. – Respiratory sensitization</p> <p>Skin Sens. – Skin sensitization</p> <p>Muta. – Germ cell mutagenicity</p> <p>Carc. – Carcinogenicity</p> <p>Repr. – Reproductive toxicity</p> <p>STOT SE – Specific target organ toxicity – single exposure</p> <p>STOT RE – Specific target organ toxicity – repeated exposure</p> <p>Asp. Tox. – Aspiration hazard</p> <p>Aquatic Acute – Hazardous to the aquatic environment, acute</p> <p>Aquatic Chronic – Hazardous to the aquatic environment, chronic</p> <p>Ozone – Hazardous for the ozone layer</p> <p>Lact. – Reproductive toxicity, additional category, effect or impact on lactation</p> <p>TLV-TWA – Threshold limit value- - Time weighted average</p> <p>TLV-STEL – Threshold limit value - Short-term exposure limit</p> <p>TLV-C – Threshold limit value - Ceiling limit</p> <p>vpvB – very Persistent and very Bioaccumulative</p> <p>PBT – Persistent Bioaccumulative and Toxic</p> <p>PNEC – Predicted No Effect Concentration</p> <p>DN(M)EL – Derived No (Minimal) Effect Level</p> <p>LD50 – Median lethal dose</p> <p>LC50 – Median lethal concentration</p> <p>ECx – Concentration showing x % Effect</p> <p>LOEC – Lowest Observed Effect Concentration</p> <p>NOEL – NOEL No Observed Effect Level</p> <p>RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail</p> <p>ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>IMDG – International Maritime Dangerous Goods Code</p> <p>ICAO/IATA – International Civil Aviation Organization/International Air Transport Association</p> <p>ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</p> <p>UVCB – Substances of Unknown or Variable Composition, Complex reaction products or Biological Materials</p>
<p><b>SECTION 15: Regulatory information</b></p> <p>15.1 <u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u></p> <p>1272/2008 Regulation of the European Parliament and of the Council (EC) of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.</p> <p>790/2009 Regulation of the European Parliament and of the Council (EC) of 10 August 2009 for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.</p> <p>2015/830 Commission Regulation of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).</p> <p>2008/98 Directive of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.</p> <p>94/62 Directive of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste.</p> <p>2012/18 Directive of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances.</p> <p>15.2 <u>Chemical safety assessment</u></p> <p>Conducted. The substance is not classified in hazards categories, and therefore there is no need to perform the Chemical Safety Report and exposure scenarios.</p>	
<p><b>SECTION 16: Other information</b></p> <p>The information in this SDS relates only to the described product and is based on our current knowledge, experience and may not be comprehensive. The end user is responsible for the use of product according to the valid regulations.</p> <p>Version: 3.0</p>	

Recommended restriction of use

None

Sources used to Safety Data Sheet preparation

Website of the European Chemicals Agency ([www.echa.eu](http://www.echa.eu)), raw material safety data sheets, website of the office of Chemical Substances ([www.chemikalia.gov.pl](http://www.chemikalia.gov.pl)).