	SAFETY DATA SHEET		
	GHF CALCIUM		
	Date of issue: 20.03.2014	Revision date: 03.08.2023	Version: 3.1

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 amended Commission Regulation (EU) 2020/878 of 18 June 2020

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: GH Feeding Calcium/ GHF Calcium
Indentifier: sodium calcium edetate
REACH No: 01-2119963941-29-0006
CAS No: 62-33-9
EC No: 200-529-9
Chemical name: ethylenediaminetetraacetic acid calcium disodium salt
IUPAC name: Calcium disodium 2-({2-[bis(carboxylatomethyl)amino]ethyl} (carboxylatomethyl) amino)acetate

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

Use of the substance/mixture: inorganic fertilizer.

1.3. Details of the supplier of the safety data sheet

PF Trading BV
(dba Green House Feeding)
Keienbergweg 49
1101EX Amsterdam Zuidoost
www.greenhousefeeding.com
e-mail address for a competent person responsible for the safety data sheet: wholesale@greenhousefeeding.com

1.4. Emergency telephone number

In case of emergency call: +31 20 7163834

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

No hazardous product as specified in EU-GHS/CLP No 1272/2008.

2.2. Label elements

Labelling according to EU-GHS/CLP No 1272/2008 - not required.

2.3. Other hazards

The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the REACH Regulation. (see section 12). Does not included in the list established in accordance with Article 59(1) for having endocrine disrupting properties or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Name: sodium calcium edetate, ethylenediaminetetraacetic acid calcium disodium salt
CAS No: 62-33-9
EC No: 200-529-9

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 amended Commission Regulation (EU) 2020/878 of 18 June 2020

REACH No: 01-2119963941-29-0006

Index No: not available

Formula: C10H12N2O8Na2Ca

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice: The first step is to put the injured person from a contaminated environment.

If swallowed:	
1.	Rinse mouth, give 2-3 glasses of water to drink. Induce vomiting. Never give anything by mouth to an unconscious person.
2.	Seek medical attention.
In case of eye contact:	
1.	Rinse thoroughly with plenty of cold water.
2.	Seek medical attention.
In case of skin contact:	
1.	Rinse off with plenty of water. Remove contaminated cloths.
2.	If symptoms persist, seek medical attention.
If inhaled	
1.	Unlikely route of exposure due to the form of the product - a non-dusting microgranules.
2.	Move to fresh air. If needed, seek medical attention.

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

The most important known symptoms and effects are described in section 2.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment.

SECTION 5. FIRE FIGHTING MEASURES

5.1. Extinguishing media	Depending on the materials stored in the neighbourhood use following extinguishing media: foam, water spray, dry chemical powder, CO2.. Unsuitable extinguishing media: none known.
5.2. Special hazards arising from the substance or mixture	Hazardous decomposition / combustion products: produces oxides of nitrogen on combustion: CO, CO2, NyOx Fire-fighters should wear suitable protective clothing such as boots, overalls, gloves,
5.3. Advice for firefighters	eye and face protection and breathing apparatus. Do not allow to enter fire-fighting water to surface water or groundwater.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General advice:	Do not flush into public water courses. Do not empty into drains, ground or surface water and soil. If the product enters drains or water, immediately inform appropriate authorities.

6.1.Personal precautions, protective equipment and emergency procedures 6.2. Environmental precautions	Ensure adequate ventilation. Use personal protective equipment – see section 8. Do not let product enter drains. If the product enters drains or water, immediately inform appropriate authorities.
6.3. Methods and material for containment and cleaning up	Sweep up shovel. Contain spillage and then collect by wet-brushing and place in container for disposal according to local regulations. After removal, wash the contaminated area with water. For disposal see section 13. For personal protective equipment see section 8.
6.4. Reference to other sections	

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling	Avoid formation of dust. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment according to section 8. Do not disposal to sewage system.
7.2. Conditions for safe storage, including any incompatibilities	Keep in original, tightly closed container in a dry place. Keep away from heat and source of ignition. Recommended storage temperature: -5oC till + 30oC.
7.3. Specific end use(s)	No data available.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters
According to the country-specific regulations.
DNEL:
Workers - Hazard via inhalation route (long term exposure, systemic effect) – 30 mg/m3
Workers - Hazard via inhalation route (acute/short term exposure, systemic effect) – Low hazard (no threshold derived)
Workers - Hazard via inhalation route (acute/short term exposure, local effect) – 10 mg/ m3
Workers - Hazard via dermal route (long term exposure, systemic effect) - 62 500 mg/kg bw/day
General Population - Hazard via inhalation route (long term exposure, systemic effect) – 7,5 mg/m3
General Population - Hazard via inhalation route (long term exposure, local effect) – 2,5 mg/m3
General Population - Hazard via dermal route (long term exposure, systemic effect) - 31 250 mg/kg bw/day
General Population - Hazard via oral route (long term exposure, systemic effect) - 6,25 mg/kg bw/day
PNEC:
PNEC aqua (freshwater) – 2,78 mg/L
PNEC aqua (marine water) - 0.28 mg/L
PNEC aqua (intermittent releases) - 1.03 mg/L
PNEC STP - 62 mg/L

Sediment (freshwater) - No exposure of sediment expected

Sediment (marine water) - No exposure of sediment expected

AIR - No hazard identified

PNEC soil – 0,2 mg/kg soil dw

8.2. Exposure controls

Personal protective equipment:

Eye/face protection	Use safety goggles
Skin/hands protection	Handle with protective gloves (recommended nitrile gloves, layer thickness 0,11 mm and breakthrough time > 480 minutes). Use protective clothing.
Industrial hygiene:	Handle in accordance with good industrial hygiene and safety practice. Change contaminated clothing. Avoid contact with skin. Avoid breathing dust. Wash hands after working with substance. When using do not eat or drink. Immediately remove spilled substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTEIS

9.1 Information on basic physical and chemical properties

Physical state	Solid, microgranules White
Colour	Odourless Decompose > 295oC (EU
Odour	Method A.1) No data available Not
Melting point/freezing point	flammable No data available No data
Boiling point or initial boiling point and boiling range	available No data available
Flammability (solid, gas)	Decompose > 295oC (EU Method
Upper and lower explosion limit	A.1) 7.0 + 1.0 Not applicable (solid)
Flash point	Soluble in water: 900 g/L -10.416
Auto-ignition temperature	(calculated)
Decomposition temperature	
pH value 1 % (w/v) solution	–
Kinematic viscosity	
Solubility	
Partition coefficient: n-octanol/water (log value)	

Vapour pressure	No data available
Relative density	0.80 ± 0.10 g/cm3
Relative vapour density	No data available
Particle characteristics	0.2 – 1.2 mm

9.2 Other information

Calcium (Ca)	10 % w/w
Calcium as CaO	14% % w/w
Conductivity of 1% solution	3,5 ± 0,2 mS/cm in 20°C

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity - the substance has low chemical reactivity.
10.2 Chemical stability - stable under normal conditions of use and storage.
10.3 Possibility of hazardous reactions - no data available
10.4 Conditions to avoid - keep away from heat.
10.5 Incompatible materials - none.
10.6 Hazardous decomposition products - in the event of fire produces oxides of nitrogen NyOx

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SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:

Substance name	% w/w	Method	Result	Units
Ca EDTA	100	LD50 (oral, rat, standard acute method)	1000	mg/kg
		LC50 (inhal, rat, 7h, standard acute method)	0	mg/l
			> 1,13	

Skin corrosion/irritation - no irritating (in vivo study, no guidance)

Serious eye damage/eye irritation - no irritating (in vivo study, no guidance)
Respiratory or skin sensitization - no skin or respiratory sensitization (OECD 429/EU Method B.42 based on data for read-across substances Fe-EDTA and Cu-EDTA)
Germ cell mutagenicity – not mutagenic; (negative, OECD Guideline 471 (Bacterial Reverse Mutation Assay))
Carcinogenicity - no carcinogen (publication Oser et al., 1963)
Reproductive toxicity – not harmful
NOAEL (P) ≥ 250 mg/kg bw/day (publication)
Specific target organ toxicity (STOT) - single exposure - no data available
Specific target organ toxicity (STOT)- repeated exposure - no data available

NOAEL (dog) ≥ 338 mg/kg bw /day (publication, no guidance)

Aspiration hazard - no data available
Potential health effects
No data available.
Signs and Symptoms of Exposure
No data available.

11.2. Information on other hazards

Does not included in the list established in accordance with Article 59(1) for having endocrine disrupting properties or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity
Fish
LC50 (bluegill sunfish, Ca EDTA) = 2340 mg/l
NOEC (fish, 35 days, OECD 210, Ca EDTA) ≥ 25,7 mg/l
Aquatic invertebrates - no available studies for Ca EDTA. The assessment was made on the basis of the read-across substances:
EC50 (daphnia manga, OECD 202, FeNaEDTA) 100,9 mg/l
NOEC (daphnia, 21 days, OECD 211, Mn EDTA) 156 mg/l
Aquatic algae and cyanobacteria - no available studies for Ca EDTA. The assessment was made on the basis of the read-across substances:
EC50 (OECD Guideline 201 (Alga, Growth Inhibition Test, MnNa2EDTA) 649,3 mg/l
12.2 Persistence and degradability.
Ca EDTA is not readily biodegradable according to OECD criteria, but ultimately biodegradable under special environmental conditions (slightly alkaline pH). No biodegradation observed in activated sludge simulation test.
12.3 Bioaccumulative potential
The Log Kow for the assessed substance is <= 4.5 indicating that the substance is not a B / vB.
12.4 Mobility in soil
The estimated log Koc values are less than the threshold value of 3, indicating no adsorbing potential for this compound. Additionally, since this compound is mostly negatively charged at relevant environmental pH values, reducing its chances of being adsorbed to soil minerals/humic acids.
12.5 Results of PBT and vPvB assessment
The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the REACH Regulation. Chemical safety assessment was not carried out.
12.6 Endocrine disrupting properties
The substances does not included in the list established in accordance with Article 59(1) for having endocrine disrupting properties or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7 Other adverse effects no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Packaging mast be disposed of in compliance with the country-specific regulations or mast be passed to a packaging return system.

SECTION 14. TRANSPORT INFORMATION

ADR/RID/ADN/IMDG/ICAO

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
14.7	Maritime transport in bulk according to IMO instruments	Not applicable

SECTION 15. REGULATORY INFORMATION

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

1. REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENTAND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC with amendments
2. COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
3. 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 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; with amendments
4. Regulation (EU) No 649/2012 Of The European Parliament and of The Council of 4 July 2012 concerning the export and import of hazardous chemicals.
5. Regulation (EC) No 850/2004 Of The European Parliament and of The Council Of 29 April 2004 On Persistent Organic Pollutants And Amending Directive 79/117/EEC.
6. European Agreement Concerning The International Carriage Of Dangerous Goods By Road (ADR)

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment was carried out.

SECTION 16. OTHER INFORMATION

Other information:
To develop this MSDS used results obtained in accordance with the requirements of REACH regulation.
Abbreviation:
DNEL: Derived No-Effect Level
PNEC: Predicted No-Effect Concentration
NOAEL: No Observed Adverse Effect Level
LD50: Lethal Dose 50%. The LD50 corresponds to the dose of a tested substance causing 50% lethality during a specified time interval.

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LC50: Lethal Concentration 50%. The LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval.
EC50: Effective Concentration 50%. The EC50 corresponds to the concentration of a tested substance causing 50% changes in response (e.g. on growth) during a specified time interval.
BCF: Bioconcentration factor
PBT: Persistent, bioaccumulative and toxic
vPvB: Very Persistent and very Bioccumulative

Indication of changes:

Section 1.2 – change in company's name: from PPC ADOB Sp. z o.o. Sp. jawna on PPC ADOB Sp. z o.o.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PPC ADOB and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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