



MERCORDI bvba
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Company registration number: α BE 2295

Tel. +32 13 46 17 20
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KBC 733-0100648-89
BE 0466.231.785
GMP - certificationnumber: 01/1440 GF



Osteoplus[®]

Material Safety Data Sheet

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Revision 18/12/2013

(In accordance with 2001/58/EC amending for the second time directive 91/155/EEC)

1. Identification of the Substance/preparation and of the company/undertaking

Product Name	OSteoplus [®]
Packaging	5L jerrycan
Use of the substance	Complementary feed for poultry Mineral supplement
Manufacturer	MERCORDI ANIMAL CARE Stadsbeemd 1215 3545 Halen, Belgium Tel. +32 13 46 17 20 Fax. +32 13 31 44 85 e-mail: info@mercordi.com
Emergency information	Antigifcentrum p/a Militair hospitaal Koningin Astrid Bruynstraat 1, 1120 Brussel Tel (+32) 02 264 96 36 Fax (+32) 02 264 96 46 Tel emergency : +32 70 245 245

2. Composition/information on ingredients

Mixture of different substances listed here with harmless additions: phosphoric acid, calcium chloride, zinc oxide, Copper(II)chloride dihydrate.

S- and R-phrases reported:

R22 - Harmful if swallowed

R34 - Causes burns



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R36 – Irritating to eyes
R38 – Irritating to skin
R43 – May cause sensitization by skin contact
R52 – harmful to aquatic organisms
R53 – May cause long-term adverse effects in the aquatic environment

S26: - in case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37: - wear suitable gloves

S60: - this material and its container must be disposed of as hazardous waste

S61: - Avoid release to the environment. Refer to special instructions/safety data sheet

CAS: 7664-38-2 EINECS: 231-633-2 EU Number: 015-011-00-6	phosphoric acid	C; R34 Skin Corr. 1B, H314	20-40%
CAS: 10043-52-4 EINECS: 233-140-8 EU Number: 017-013-00-2	calcium chloride	Xi, R36 Eye Irrit. 2; H319	10-15%
CAS: 1314-13-2 EINECS: 215-222-5 EU Number: 030-013-00-7	zinc oxide	N, R50/53 Aquatic acute 1, Aquatic Chronic 1; H400 H410	< 1%
CAS: 10125-13-0 EINECS: 231-210-2	Copper(II)chloride dihydrate	Xn, R22; Xi, R36/37/38; N, R50/53 Acute Tox. 4, skin Irrit.2, Eye Irrit.2; Aquatic Acute 1, Aquatic chronic 1; H302, H315 H319 H400 H410	< 1%

Xi: irritant, N: dangerous for the environment.



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According to the new GHS- system (EC 1272/2008):

H315: irritating to skin

H319; causes serious eye irritation

H410: Very toxic to aquatic life with long lasting effects

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

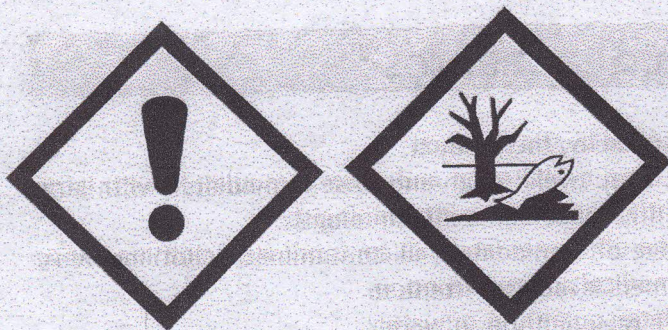
P302+ P352: IF ON SKIN: Wash with plenty of soap and water

P332+ P313: If skin irritation occurs: Get medical advice/attention

P362: Take off contaminated clothing and wash before reuse

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: get medical advice/attention



GHS 07-GHS09

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3. Hazards identification



Xi : Irritant

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Inhalation: Prolonged or massive inhalation may cause problems.

Ingestion: Prolonged or massive ingestion may cause intoxication and hypersensitivity

Skin contact: may cause irritation

Eyes contact: May cause irritation.

4. First aid measures

General information: instantly remove any clothing soiled by the product.

After eye contact: If the product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After Skin contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: get medical advice/attention.

After ingestion: Rinse mouth immediately and drink large quantities of water.

After inhalation: Provide fresh air.

Information for doctor: no particular measures are known – treat according to symptoms.

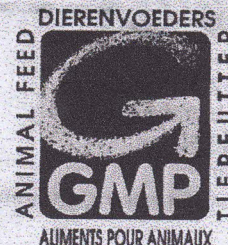
5. Fire-fighting measures

Extinguishing means: Use any means suitable for extinguishing surround fire: Fire-fighting powder, alcohol-resistant foam, water spray, carbon dioxide.



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Special risk: The product itself is not combustible. Formation of toxic gasses is possible during heating or in case of fire.

Additional information: Use a water spray jet to knock down vapours/gases/mists. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Provide adequate ventilation. Do not breathe gas/fumes/vapours/spray. Avoid contact with skin, eye and clothing. Wear personal protection equipment. Do not empty into drains or the aquatic environment.

Inform respective authorities in case of seepage into water course or sewage system. Do not allow product to enter sewers/surface of ground water.

The product needs to apply neutralizing agents before draining to wastewater treatment plants. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid-or universal binding agents). Treat the assimilated material according to the section on waste disposal.

7. Handling and storage

Handling: Keep container tightly closed in a cool, well-ventilated place. In case of open handling, use devices with built-in suction where possible. Do not breathe gas/fumes/vapour/spray.

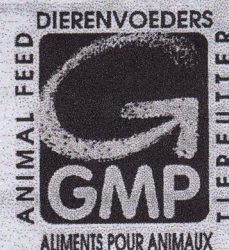
Storage:

- Keep material in a tightly closed bottle, stored in a dry and well-ventilated place.
- Expiration date : 2 years
- Protect against physical damage (protection from frost or from heat and direct sunlight).
- Store away from foodstuffs
- Storage category: 8A.



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8. Exposure controls/ personal protection

Respiratory protection:

- Precautions to avoid inhalation.
- In the absence of suitable containment facilities, a dust mask should be worn when handling small quantities of material. For larger quantities, a dust respirator is recommended.

Skin protection:

- Wear protective gloves and clean body-covering and chemical resistant clothing.
- The glove material has to be permeable and resistant to the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- 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 cannot be calculated in advance and has therefore to be checked prior to the application.
- PVC gloves or Rubber gloves are suitable.

Eye protection:

- Use chemical safety goggles, which can be tightly sealed
- Maintain eye wash fountain and quick-drench facilities in work area.

Industrial hygiene:

- Change contaminated clothing.
- Wash hands after any contact with substance, before breaks and meals and at the end of the work period.
- Good personal hygiene practices should be used. Do not eat, drink or smoke during work.

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Exposure limits (EH40)

Cas No	Substance	Pp m	mg/m ³	Fibres/ml	Category	Origin
1309-49-4	Magnesium oxide (as Mg), fume and respirable dust	-	4		TWA (8h)	WEL
		-	-		STEL (15min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8h)	WEL
		-	2		STEL(15min)	WEL

9. Physical and chemical properties

Organoleptic assay:

Form	Liquid
Colour	bright green
Odour	sweet

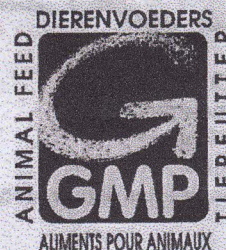
Physical assay:

Boiling point	100°C
Flash point	/
Flammability	product is not self-igniting
Explosive properties	Product is not explosive
Oxidising properties	/
Vapour pressure	23 hPa at 20°C
Relative density	1,3 g/cm ³
Solubility	water soluble
Partition coefficient	/
Viscosity	/
Vapour density	/
Evaporation rate	/



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10. Stability and reactivity

Stability: Store in original container at ambient conditions. No thermal decomposition if used according to specifications. To avoid thermal decomposition do no overheat. If overheated: no dangerous decomposition products known.

Reactivity: no dangerous reactions known

11. Toxicological information

- **Acute toxicity**

LD/ LC50 values relevant for classification

7664-38-2 phosphoric acid		
Oral	LD50	1530 mg/kg (rat)
Dermal	LD50	2740 mg/kg (rat)
Inhalative	LC50	>0,85 mg/L (rat, 1h)
10043-52-4 Calcium chloride		
Dermal	LD50	2630 mg/kg (rat)

- **Primary irritant effect**
 - On the skin: irritant to skin and mucous membranes
 - On the eye: irritating effect
- **Sensitising effects**
 - No sensitizing effect known
- **Additional information on tests**
 - The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

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12. Ecological information

CAS No	Chemical name	Method-Dose	h	Species	Source
7664-38-2	Phosphoric acid % ; orthophosphoric acid				
	Acute fish toxicity	LC50-138 mg/l	96	Gambusia affinis	
10125-13-0	Copper (II) Chloride-2-hydrate				
	Acute Fish Toxicity	LC50- 0,0028 mg/l	96		
	Acute crustacean toxicity	EC50-0,00084 mg/l	48	Daphnia magna	

The components in this formulation do not meet the criteria for classification as PBT or vPvB.
The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

13. Disposal considerations

Product: Waste disposal number of waste from residues/unused products:

020108 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING; wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing; agrochemical waste containing dangerous substances classified as hazardous waste

Packaging: Disposal in accordance with local legal provisions.

Note: always look to the national or regional provisions which are in force for your country



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14. Transport regulation

LAND TRANSPORT (ADR/RID)

UN number	UN 1805
UN proper shipper name	PHOSPHORIC ACID SOLUTION
Transport hazard class(es)	8
Packing group	III
Hazard label	8
Classification code	C1
Limited quantity	5L
Transport category	3
Hazard No	80
Tunnel restriction code	E

OTHER APPLICABLE INFORMATION (LAND TRANSPORT)

E1

INLAND WATERWAYS TRANSPORT (AND)

UN number	UN 1805
UN proper shipper name	PHOSPHORIC ACID SOLUTION
Transport hazard class(es)	8
Packing group	III
Hazard label	8
Classification code	C1
Limited quantity	5L

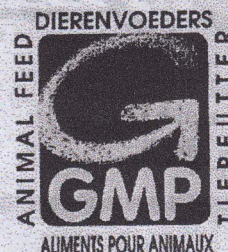
OTHER APPLICABLE INFORMATION (INLAND WATERWAYS TRANSPORT)

E1



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MARINE TRANSPORT (IMDG)

UN number	UN 1805
UN proper shipper name	PHOSPHORIC ACID SOLUTION
Transport hazard class(es)	8
Packing group	III
Hazard label	8
Special Provisions	223
Limited quantity	5L
EmS	F-A, S-B

OTHER APPLICABLE INFORMATION (MARINE TRANSPORT)

E1

AIR TRANSPORT (ICAO)

UN number	UN 1805
UN proper shipper name	PHOSPHORIC ACID SOLUTION
Transport hazard class(es)	8
Packing group	III
Hazard label	8
Special Provisions	A3 A803
Limited quantity	1L
IATA-packing instruction-Passenger	852
IATA-max. quantity-Passenger	5L
IATA-packing instructions- Cargo	856
IATA-max.quantity-Cargo	60L

OTHER APPLICABLE INFORMATION (MARINE TRANSPORT)

E1

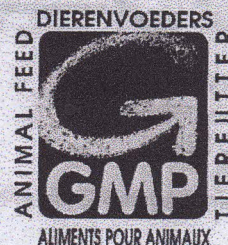
Passenger-LQ: Y841

Warning: corrosive substances!



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15. Regulatory information

National regulatory information

Water contaminating class (D)

1- Slightly water contaminating

Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

16. Other information

The information provided under subheadings 1-15 is correct to the best of our ability and present knowledge and therefore does not guarantee certain properties. Users of the product must be aware of existing laws and regulations and handle the product in accordance with them.

The information and specifications contained in this safety data sheet, complement, but do not substitute for that of the "Technical data sheet" on this product. Users are required to observe the recommendation provided in this document in order to avoid risks.

The above indicated information is based on our current knowledge, up to date experiences and a perfect and exact process of manipulation, treatment and dosage. However given the numerous factors which are not under our control and may alter manipulation and usage of this product, Mercordi BVBA does not assume either responsibilities or obligations for the recommendations made, be it for results or for claims and damages which may derive from its utilisation. The users should carry out their own tests and controls and confirmation of resulting products, using the product adequately for the desired result. Existing patent rights as well as current laws and regulations should be respected at all times.