

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

1.1. Product identifier

Product form : Mixture
 Name : PHYSIOSTART 0-0-0
 Product code : PHYSIOSTARTUSA
 Product group : Mixture

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

1.2.1. Relevant identified uses

Main use category : Professional use
 Use of the substance/mixture : Fertilizer
 Function or use category : Fertilisers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

TIMAC AGRO USA, INC
 P.O. Box 888 - Route 724 & I-176
 READING - USA
 T 1-800-545-5474
info-fds@roullier.com

Manufacturer

TIMAC AGRO
 27 avenue Franklin Roosevelt
 35408 Saint-Malo cedex - FRANCE
 T +33 2 99 20 65 20
info-fds@roullier.com - www.roullier.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
Europe/Middle-East/Africa	3E (24h/7d)		+1-760-476-3961 (Access code : 333021)
USA	USA POISON CONTROL CENTER (24h/7d)		1-800-222-1222

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Chronic 3 H412

Full text of H-statements: see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : -
 Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects
 Precautionary statements (CLP) : P501 - Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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according to Regulation (EU) No. 2015/830

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Zinc oxide	(CAS No) 1314-13-2 (EC no) 215-222-5 (EC index no) 030-013-00-7 (REACH-no) 01-2119463881-32	0,25 - 2,49	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
copper sulphate	(CAS No) 7758-98-7 (EC no) 231-847-6 (EC index no) 029-004-00-0 (REACH-no) 01-2119520566-40	0,025 - 0,249	Xn; R22 Xi; R36/38 N; R50/53	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove the victim into fresh air. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Wash with plenty of water. If on skin and if skin irritation occurs, seek medical advice and attention.
- First-aid measures after eye contact : Rinse immediately and thoroughly with clean water during at least 15 minutes, keeping the eyes wide open. Consult an eye specialist if an irritation appears.
- First-aid measures after ingestion : Rinse mouth out with water. Drink plenty of water. Give water to drink if victim completely conscious/alert. If you feel unwell, seek medical advice.

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Agents compatible with other products involved in the fire.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : In case of fire in the surroundings: Toxic gases may be formed. Sulphur oxides.

5.3. Advice for firefighters

- Protection during firefighting : Self-contained breathing apparatus. Do not enter or remain in the danger zone without protection clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid dust production. Wear suitable protective clothing.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Do not allow into drains or water courses.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spillage. Carefully collect remainder. Wash contaminated area with large amounts of water.

6.4. Reference to other sections

SECTION 8. SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Do not allow into drains or water courses.
- Precautions for safe handling : Avoid dust formation. Avoid contact with skin, eyes and clothing.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area.
Incompatible products : Refer to Section 10 on Incompatible Materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Zinc oxide (1314-13-2)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	3,1 mg/m ³ Zinc oxide
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	1,5 mg/m ³ Zinc oxide
PNEC (Water)	
PNEC aqua (freshwater)	0,0256 mg/l Zinc oxide
PNEC aqua (marine water)	0,0076 mg/l Zinc oxide
PNEC (Sediment)	
PNEC sediment (freshwater)	146 mg/kg dwt Zinc oxide
PNEC sediment (marine water)	70,3 mg/kg dwt Zinc oxide
PNEC (Soil)	
PNEC soil	44,3 mg/kg dwt Zinc oxide
PNEC (STP)	
PNEC sewage treatment plant	0,0647 mg/l Zinc oxide

copper sulphate (7758-98-7)	
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0,082 mg/kg bodyweight
Long-term - systemic effects, oral	0,041 mg/kg bodyweight/day

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation.
Personal protective equipment : Safety glasses.
Hand protection : In case of repeated or prolonged contact wear gloves
Eye protection : Safety glasses
Respiratory protection : In case of dust formation use respirator with filter: Dust production: dust mask with filter type P2



Other information : Do not drink, eat or smoke in the workplace. Always wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : White. Grey.
Odour : odourless.
Odour threshold : No data available
pH : No data available
pH solution : 7 - 9,5
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : Not applicable
Flash point : Not applicable
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Flammability (solid, gas) : No data available

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Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1200 - 1400 kg/m ³
Solubility	: Soluble in water.
Log Pow	: Not determined
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: No data available
Explosive limits	: Not applicable Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No study has been carried out for the moment on this mixture.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong acids. halogens (F, Cl, Br, I).

10.6. Hazardous decomposition products

Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)
No study has been carried out for the moment on this mixture.

Zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LC50 inhalation rat (mg/l)	(4h) > 5700 mg/m ³ OECD 403

copper sulphate (7758-98-7)	
LD50 oral rat	OCDE 401 480 mg/kg Copper Sulphate
LD50 dermal rat	OCDE 402 ≥ 2000 mg/kg Copper Sulphate

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: No study has been carried out for the moment on this mixture.
Respiratory or skin sensitisation	: Not classified No data available
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No study has been carried out for the moment on this mixture.

Zinc oxide (1314-13-2)	
LC50 fish 1	96h 1,1 - 1,5 ppm Oncorhynchus mykiss (Rainbow trout)

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Zinc oxide (1314-13-2)	
EC50 other aquatic organisms 1	72h 0,17 mg/l algae
NOEC (chronic)	0,017 mg/l algae

copper sulphate (7758-98-7)	
LC50 fish 1	96h 0,1 - 2,5 mg/l
EC50 Daphnia 1	0,025 mg/l
EC50 other aquatic organisms 2	0,1 mg/l CE 50 (algae)
NOEC (chronic)	0,0078 mg/l

12.2. Persistence and degradability

PHYSIOSTART 0-0-0	
Persistence and degradability	No study has been carried out for the moment on this mixture.

Zinc oxide (1314-13-2)	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

PHYSIOSTART 0-0-0	
Log Pow	Not determined
Bioaccumulative potential	No study has been carried out for the moment on this mixture.

Zinc oxide (1314-13-2)	
Log Pow	2,2
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

PHYSIOSTART 0-0-0	
Ecology - soil	No study has been carried out for the moment on this mixture.

Zinc oxide (1314-13-2)	
Ecology - soil	Material nearly insoluble in water.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : No data available.
Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Do not allow into drains or water courses.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

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ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : None

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

Not subject to ADN : No

- Rail transport

Carriage prohibited (RID) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : Refer to all applicable national, international and local regulations or provisions.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

Zinc oxide
copper sulphate

SECTION 16: Other information

Data sources : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from components' supplier.

Other information : This mixture does not require safety data sheet in accordance with Article 31 of Regulation No 1907/2006 (REACH). according to Regulation (EC) No. 1907/2006 (REACH).

Full text of R-, H- and EUH-statements:

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according to Regulation (EU) No. 2015/830

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product