

NANOPHOS SA	Revision No. 4
	Dated 20/08/2018
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Safety data sheet

In accordance with Annex II of REACH - Regulation 2015/830

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

1.1. Product identifier	NanoPhos_GA_31072018-015
Code: Product name	SurfaMix P
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Intended use	High-quality nanostructured primer for exterior or interior emulsion paints
1.3. Details of the supplier of the safety data sheet	
Name and surname	NANOPHOS SA
Full address	Technological and scientific park
District and country	19 500 Lavrio (Greece)
	Greece
	Phone +30 22920 69312
	Fax +30 22920 69303
email address of the competent person	
responsible for the safety data sheet	iarabatz@NanoPhos.com
Product distribution by:	Ioannis Arabatzis
1.4. Emergency telephone number	
For urgent requests, please consult	+30 22920 69312

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous in accordance with the provisions of Regulation (EC) No 1272/2008 (CLP). However, as the product contains hazardous substances in concentrations that must be declared in section 3, it requires a safety data sheet with appropriate information, in accordance with Regulation (EU) 2015/830.

Hazard classification and indication:

2.2. Label elements

Hazard labeling in accordance with EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:	--
Signal words:	--

Hazard phrases:

EUH210	The safety data sheet is available upon request.
EUH208	Contains:, Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

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It may cause an allergic reaction.

Precautionary statements:

P102	Keep out of reach of children.
P261	Avoid breathing smoke/gas/mist/vapour/spray.
P271	Use only outdoors or in a well-ventilated area.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P404	Store in a closed container.
P410	Protect from sunlight.
P501	Dispose of contents/container in accordance with local/national legislation.
P101	If medical advice is needed, have the product container or label at hand.
P103	Read the label before use.

2.3. Other hazards

Based on available data, the product does not contain PBT or vPvB in percentages greater than 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information that is not relevant

3.2. Mixtures

Contain:

Identification	x= Conc. %	Classification 1272/2008 (CLP)
Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one		
CAS 55965-84-9	0 < x< 0.0015	Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
WHAT - INDEX 613-167-00-5		

The full wording of the hazard (H) phrases is presented in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Immediately flush with plenty of water for at least 30-60 minutes, holding the eyelids wide open. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin immediately with a shower. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Obtain medical advice/attention. Do not induce vomiting unless specifically directed by a physician.

INHALATION: Seek immediate medical advice/attention. Remove victim to fresh air, away from the scene of the accident. If subject is not breathing, administer artificial respiration. Take appropriate precautions for rescue personnel.

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

No specific information is known regarding symptoms and effects caused by the product.

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

Information is not available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

ADEQUATE FIRE EXTINGUISHING EQUIPMENT

Extinguishing equipment should be of the conventional type: carbon dioxide, foam, powder and water spray. INADEQUATE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use water jets to cool containers to prevent product decomposition and the release of substances potentially hazardous to health. Always wear full fire-fighting equipment. Collect extinguishing water to prevent it from flowing into the sewage system. Dispose of contaminated used water for extinguishing and fire debris in accordance with applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Normal firefighting clothing, namely firefighter's kit (BS EN 469), gloves (BS EN 659) and boots (HO specifications A29 and A30) in combination with a positive pressure, open circuit, self-contained breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the drain if there is no danger.

Wear appropriate protective equipment (including personal protective equipment as specified in section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. This applies to both processing personnel and those involved in emergency procedures.

6.2. Environmental precautions

The product must not enter the sewage system or come into contact with surface or underground waters.

6.3. Methods and materials for containment and cleaning up

Collect spilled product in a suitable container. Assess the compatibility of the container to be used by checking section 10. Absorb the remainder with inert absorbent material.

Ensure that the spill area is well ventilated. Contaminated material should be disposed of in accordance with the provisions of section 13.

6.4. Reference to other sections

All information on personal protection and disposal is provided in sections 8 and 13.

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SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and open flames; do not smoke or use matches or lighters. Vapours can catch fire and an explosion may occur; therefore, the accumulation of vapours should be avoided by leaving windows and doors open and ensuring good cross ventilation. In the absence of adequate ventilation, vapours may accumulate at ground level and, if ignited, may ignite even at a distance, with the risk of fire. Avoid the accumulation of electrostatic charges. When carrying out transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous agitation and flow through pipes and equipment may cause the formation and accumulation of electrostatic charges. To avoid the risk of fire and explosion, never use compressed air during handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in the original container. Store containers tightly closed, in a well-ventilated place, away from direct sunlight. Store in a well-ventilated place, away from heat, flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information is not available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information is not available.

8.2. Exposure control

Since the use of appropriate technical equipment must always take priority over personal protective equipment, ensure that the workplace is well ventilated through effective local exhaust ventilation.

When choosing personal protective equipment, seek advice from the chemical supplier. Personal protective equipment must bear the CE marking, which attests to its compliance with the applicable standards.

HAND PROTECTION

Protect your hands with category III work gloves (see standard EN 374).

When choosing the material for work gloves, the following aspects must be considered: compatibility, degradation, failure time and permeability.

The resistance of work gloves to chemical agents should be checked before use, as it can be unpredictable. The wear time of the gloves depends on the duration and type of use.

SKIN PROTECTION

Wear professional long-sleeved category I overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with water and soap after removing protective clothing.

EYE PROTECTION

Wear tight-fitting safety goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) for the substance or one of the substances present in the product is exceeded, use a type B filter mask whose class (1, 2 or 3) must be chosen according to the limit concentration of use. (see standard EN 14387). In the presence of gases or vapours of different types and/or gases or vapours containing particles (aerosols, fumes, mists, etc.) combined filters are required.

Respiratory protective devices must be used if the technical measures adopted are not adequate to limit the worker's exposure to the threshold values considered. The protection offered by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in case of emergency, wear an open-circuit compressed air breathing apparatus (in accordance with standard EN 137) or an external suction breathing apparatus (in accordance with standard EN 138).

For correct choice of respiratory protective device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROL

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Emissions generated by manufacturing processes, including those generated by ventilation equipment, must be verified to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties		
appearance	liquid	
Color	light blue	
Smell	odorless	
Odor threshold	Not available	
pH	7.6±0.5	
Melting point/freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	> 100 °C	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
Lower flammability limit	Not available	
Upper flammability limit	Not available	
Lower explosive limit	Not available	
Upper explosion limit	Not available	
Vapor pressure	Not available	
Vapor density	Not available	
Relative density	1.00±0.05kg/L	
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Autoignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	3 mPa.s	
Explosive properties	Not available	
Oxidizing properties	Not available	

9.2. Other information		
VOC (Directive 2010/75/EC) :	0.77% -	7.70 g/liter

SECTION 10. Stability and reactivity

10.1. Reactivity		
There are no special risks of reaction with other substances under normal conditions of use.		
10.2. Chemical stability		
The product is stable under normal conditions of use and storage.		
10.3. Possibility of hazardous reactions		
No hazardous reactions are expected under normal conditions of use and storage.		
10.4. Conditions to avoid		
None in particular. However, the usual precautions used for chemical products should be observed.		
10.5. Incompatible materials		
Information is not available.		

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10.6. Hazardous decomposition products

Information is not available.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are assessed based on the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to consider the individual hazardous substances indicated in section 3, in order to assess the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information is not available.

Information on likely routes of exposure

Information is not available.

Delayed and immediate effects, as well as chronic effects of short- and long-term exposure

Information not available Effects

interaction

Information unavailable

ACUTE TOXICITY

LC50 (inhalation) of the mixture:
Not classified (no significant component)
LD50 (oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one LC50 (inhalation) 0.51

mg/l/4h Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE/IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITIZATION

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May produce an allergic reaction. Contains: Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one **MUTAGENICITY**

GERM CELLS

Does not meet the classification criteria for this hazard class

carcinogen

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

No specific data are available for this product. Handle in accordance with good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities if the product reaches water courses or contaminates soil or vegetation. Please take all appropriate measures to reduce the harmful effects on aquifers.

12.1. Toxicity

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one	
LC50 - for fish	0.58 mg/l/96h
EC50 - for crustaceans	1.02 mg/l/48h

12.2. Persistence and degradability

Information is not available.

12.3. Bioaccumulative potential

Information is not available.

12.4. Mobility in soil

Information is not available.

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12.5. Results of PBT and vPvB assessment

Based on available data, the product does not contain PBT or vPvB in percentages greater than 0.1%.

12.6. Other adverse effects

Information is not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Clean product residues should be considered non-hazardous special waste.
Disposal must be carried out through a licensed waste management company, in accordance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in accordance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous according to the current provisions of the International Road Transport Code (ADR) and Rail Transport Code (RID), the International Maritime Dangerous Goods Code (IMDG) and the regulations of the International Air Transport Association (IATA).

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 risks

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Not applicable

14.6. Special precautions for the user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information that is not relevant

SECTION 15. Regulatory Information

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or the substances contained in accordance with Annex XVII to Regulation (EC) No 1907/2006

None

Substances on the Candidate List (Art. 59 REACH) _____

Based on the available data, the product does not contain any SVHC in percentages higher than 0.1%. Substances subject to authorisation (annex

XIV REACH).

None

Substances subject to export reporting in accordance with Regulation (EC) No 649/2012: _____

None

Substances subject to the Rotterdam Convention: _____

None

Substances subject to the Stockholm Convention: _____

None

Health checks _____

Information is not available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the mixture and the substances it contains.

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SECTION 16. Other information

Text of the hazard statements (H) mentioned in section 2-3 of the sheet:

Acute toxicity. 3	Acute toxicity, category 3
Leather Corr. 1B	Skin corrosion, category 1B
Sensitive to skin. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H314	Causes severe skin burns and eye damage.
H317	It may cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH210	The safety data sheet is available upon request.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- EC50: Effective concentration (necessary to induce a 50% effect)
- EC NUMBER: Identifier in ESIS (European Archive of Existing Substances)
- CLP: Regulation EC 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Service
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulations
- IC50: 50% immobilization concentration
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI to CLP
- LC50: Lethal concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic as per REACH Regulation
- PEC: Predicted Environmental Concentration
- PEL: Expected Exposure Level
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations concerning the international carriage of dangerous goods by rail
- TLV: threshold limit value
- TLV CEILING: Concentration that should not be exceeded during occupational exposure.
- TWA STEL: short-term exposure limit
- TWA: Time Weighted Average Exposure Limit
- VOC: volatile organic compounds
- vPvB: very persistent and very bioaccumulative according to the REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) No 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

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- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- Merck Index. - 10th Edition
- Chemical safety handling
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- NI Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS templates for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy Note for users:

The information contained in this sheet is based on our own knowledge at the date of the last version. Users must verify the suitability and completeness of the information provided for each specific use of the product.

This document should not be considered a guarantee for any specific property of the product.

The use of this product is not under our direct control; therefore, users must, at their own risk, comply with applicable health and safety laws and regulations. The manufacturer is exempt from any liability arising from improper use.

Provide designated personnel with adequate training on how to use chemicals.

Changes since the previous revision:

The following sections have been modified: 02 / 03 / 08 / 10 / 11 / 12 / 13 / 15 / 16.