

Safety Data Sheet

1. Identification of the substance / preparation and the Company

1.1 Identification of the substance or preparation

Product name **STERYLPLUS**

1.2 Use of the substance / preparation

Intended use **Universal water based additive, resistant to mould and algae.**

1.3 Company identification

Name **OIKOS SRL**
Full address **Via Cherubini, 2**
District and Country **47043 GATTEO A MARE FC**
ITALIA
Tel. **0039-0547-681412**
Fax **0039-0547-681430**

e-mail address of the competent person responsible for the Safety Data Sheet **labtech@oikos-paint.com**

1.4 Emergency telephone

For urgent inquiries refer to **0039-0547-681412 Laboratorio R&S. OIKOS srl**
0039-0557-947819 Centro Antiveneni (Anti-poison Centre)
OSPEDALE Careggi, Firenze, Italia

2. Hazards Identification

2.1 Substance/Preparation Classification

This product is dangerous under 67/548/EEC and 1999/45/EC directives and subsequent amendments. Therefore, this product requires a safety data sheet according to the Regulation (EC) 1907/2006 and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Danger Symbols: **Xi-N**
R phrases: **43 - 50/53**

2.2 Danger Identification

MAY CAUSE SENSITIZATION BY SKIN CONTACT.
VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

3. Composition / Information on ingredients

Contains:

Name	Concentration % (C)	Classification
ZINC OXIDE <i>C.A.S. number</i> 1314-13-2 <i>EC number</i> 215-222-5 <i>INDEX number</i> 030-013-00-7	1,40<= C <2,00	N R50/53
PYRITHIONE ZINC <i>C.A.S. number</i> 13463-41-7 <i>EC number</i> 236-671-3	0,30<= C <0,35	T R23 Xn R22 Xi R38 Xi R41 N R50
2-OCTYL-2H-ISOTHIAZOL-3-ONE <i>C.A.S. number</i> 26530-20-1 <i>EC number</i> 247-761-7 <i>INDEX number</i> 613-112-00-5	0,10<= C <0,15	T R23/24 C R34 Xn R22 Xi R43 N R50/53
TERTBUTRINE <i>C.A.S. number</i> 886-50-0 <i>EC number</i> 212-950-5	0,30<= C <0,35	N R50/53

The complete text of -R- phrases is specified in section 16.

4. First aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

5. Fire-fighting measures**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of foam.

6. Accidental release measures**PERSONAL PRECAUTIONS**

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet.

ENVIRONMENTAL PRECAUTIONS

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

METHODS FOR CLEANING UP

Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

7. Handling and storage

Store in a well ventilated place, keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, bright flames and sparks and other sources of ignition.

8. Exposure control / personal protection.**8.1 Exposure limit values**

Product name	Type	Country	TWA/8h		STEL/15min	
			mg/m3	ppm	mg/m3	ppm
ZINC OXIDE	TLV-ACGIH		2	0,6	10	3
	OEL	IRL	5		10	
CALCIUM CARBONATE	OEL	IRL	4			
	WEL	UK	4			
1,2-PROPANEDIOL	OEL	IRL	10			
	WEL	UK		150		

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

Protect hands with category II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitril or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an B or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

An emergency eye washing and shower system must be provided.

9. Physical and chemical properties

Colour	White
Odour	Characteristic
Appearance	Paste
Solubility	Mixable in water
Viscosity	5000-11000 cps
Vapour density	Not available
Evaporation Rate	Not available
Reactive Properties	Not available
Partition coefficient: n-octanol/water	Not available
pH	7-11
Boiling point	Not available
Flash point	100 °C
Explosive properties	Not available
Vapour pressure	Not available
Specific gravity	1,000 Kg/l
VOC (Directive 1999/13/EC) :	0%

10. Stability and reactivity

The product is stable in normal conditions of use and storage. When heated or in the event of a fire, carbon oxides may be released and vapours which are dangerous to health. The vapours may also form explosive mixtures with the air.

Propylene glycol: it is hygroscopic, stable at normal conditions; at high temperatures, it tends to oxidize yielding propionaldehyde as well as lactic and acetic acid.

11. Toxicological information

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

12. Ecological information

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it may even have negative effects on aquatic environment.

ZINC OXIDE

LC50 (96h) 1,1 mg/l *Oncorhynchus mykiss*

EC50 (48h) 1.000 mg/l *Daphnia magna*

PYRITHIONE ZINC

LC50 (96h) 0,06 mg/l *Onchorhynchus mykiss*

EC50 (48h) 0,05 mg/l *Daphnia magna*

IC50 (72h) 0,067 mg/l *Selenstrum Capricornutum*

2-OCTYL-2H-ISOTHIAZOL-3-ONE

LC50 (96h) 0,03 mg/l *Oncorhynchus mykiss*

EC50 (48h) 0,1 mg/l *Daphnia magna*

IC50 (72h) 0,084 mg/l *Scenedesmus subspicatus*

TERTBUTRINE

LC50 (96h) 1,8 mg/l *Rasbora heteromorpha*

EC50 (48h) 7,1 mg/l *Daphnia magna*

IC50 (72h) 0,0036 mg/l *senastrum capricornutum*

13. Disposal consideration

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Waste transportation may be subject to ADR restrictions.

14. Transport information


These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.

These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class: 9 UN082
 Packing Group: III
 Label:
 Nr. Kemler:
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.(S-triazine) (2-OCTYL-2H-ISOTHIAZOL-3-ONE;TERTBUTRINE)

Carriage by sea (shipping):

IMO Class: 9 UN082
 Packing Group: III
 Label: 
 EMS:
 Marine Pollutant YES
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.(S-triazine) (2-OCTYL-2H-ISOTHIAZOL-3-ONE;TERTBUTRINE)

Transport by air:

IATA: 9 UN082
 Packing Group: III
 Label:
 Cargo:
 Packaging instructions: 914 Maximum quantity: NONE
 Pass.:
 Packaging instructions: 914 Maximum quantity: NONE
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.(S-triazine) (2-OCTYL-2H-ISOTHIAZOL-3-ONE;TERTBUTRINE)

15. Regulatory information

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IRRITANT

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DANGEROUS FOR THE ENVIRONMENT

- R43** MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
S24 AVOID CONTACT WITH SKIN.
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 SHEETS.

Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

IRG 00002

16. Other information

Text of -R- phrases quoted in section 3 of the sheet.

R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R23	TOXIC BY INHALATION.
R22	HARMFUL IF SWALLOWED.
R38	IRRITATING TO SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R50	VERY TOXIC TO AQUATIC ORGANISMS.
R23/24	TOXIC BY INHALATION AND IN CONTACT WITH SKIN.
R34	CAUSES BURNS.
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);
3. Regulation (EC) 1272/2008 (CLP) of the European Parliament;
4. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
5. The Merck Index. - 10th Edition;
6. Handling Chemical Safety;
7. Niosh - Registry of Toxic Effects of Chemical Substances;
8. INRS - Fiche Toxicologique (toxicological sheet);
9. Patty - Industrial Hygiene and Toxicology;
10. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition;

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review

The following sections were modified:

08/13/14