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	<b>Revision Nr: 0</b>
	<b>Date: 11/10/2010</b>
<b>Solcide P 106</b>	<b>Supersedes: 0/0/00</b>

## **1. Identification of the Substance/Preparation and of the Company Undertaking**

Product Name: Solcide P106

Product Code

### Use/Description of Product

Biocidal product for industrial and/or commercial use.

This product is a biocide according to Directive 98/8/EC and is recommended for use in the application fields listed in section 16.

### Company Name

Solstar Europe Limited  
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Office No : + 44 (0) 1925 753879  
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### Competent Person responsible for Safety Data Sheet

Richard Hirst, E-Mail: [rjh@solstareurope.com](mailto:rjh@solstareurope.com)

## **2. Hazard Identification**

### Hazard Designation:



C – Corrosive

### Information pertaining to particular dangers for man and environment

R34 Causes burns.

R43 May cause sensitization by skin contact.

### Classification system

The classification of health and environment hazards is based on experimental and epidemiological data together with the conventional method according to Articles 6 and 7 of Directive 1999/45 EC.






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### **3. Compositional Information on Ingredients**

#### Chemical Characterisation

##### Description:

Preservative based on isothiazolones.

Dangerous Components		
CAS: 55965-84-9 Index Number 613-167-00-5	Mixture, containing 5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)  <b>T</b> ,  <b>C</b> ,  <b>N</b> ; R 23/24/25-34-43-50/53	1.5%

#### Additional Information:

The CAS No. of the single components are CIT: 26172-55-4; MIT: 2682-20-4

For the wording of the listed risk phrases refer to section 16.

### **4. First Aid Measures**

#### General Information

Personal Protection for the first aider.

#### After Inhalation

Supply fresh air; consult doctor in case of symptoms.

#### After Skin Contact

Remove contaminated clothing immediately.

Destroy or thoroughly clean contaminated shoes.

Wash immediately with plenty of water and soap and rinse thoroughly.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

In case of extensive skin contact immediately use safety shower.

#### After Eye Contact

Rinse opened eye for at least 15 minutes under running water and apply a sterile protective bandage. Get medical attention.

#### After Swallowing

Rinse mouth and drink plenty of water.

Do not induce vomiting. Call for medical help.

Bring vomiting person into recovery position.

#### Information for the Doctor

##### The following symptoms may occur

Allergic skin reaction.

Corrosive damage to gastro-intestinal tract.

Skin reaction like itching, reddening, blistering may appear after hours.

**Danger** if swallowed or in case of vomiting, hazard of entering the lungs (aspiration)



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#### Treatment

Treat skin and mucous membrane with antihistamine and corticoid preparations.  
Rinse eyes thoroughly with physiological saline.

### **5. Fire Fighting Measures**

#### Suitable extinguishing agents:

Water spray jet, extinguishing powder, CO<sub>2</sub>, foam.

#### Unsuitable extinguishing agents for reasons of safety:

None

#### Special hazards caused by the material, its products of combustion or flue gasses:

Under certain fire conditions, traces of toxic gases cannot be excluded, e.g.:

Nitrogen Oxides (NO<sub>X</sub>)

Carbon Monoxide (CO)

Sulphur Dioxide (SO<sub>2</sub>)

Hydrogen Chloride (HCl)

#### Protective equipment

Wear self contained breathing apparatus.

#### Additional Information:

Collect contaminated fire fighting water separately. It must not enter drains.

### **6. Accidental Release Measures**

#### Personal safety precautions:

Wear protective clothing (See item 8).

Keep unprotected persons away.

When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermeable protective clothes, protective boots made of neoprene, complete face protection and nitrile-rubber-gloves with long tops should be worn.

#### Measures for environmental protection

Prevent from spreading (e.g. by enclosing with a ring of chemical absorbent).

As the product is hazardous for aquatic environment, it must be prevented from reaching surface water.

Inform authorities in case of contamination of water sewage system.

#### Measures for cleaning/collecting:

Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.

Suitable binder: Multipurpose absorbent.

Dispose of contaminated material as waste according to item 13.

Provide adequate ventilation.



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Polluted surfaces can be decontaminated with a solution containing 5% Sodium bisulphate and 5% Sodium bicarbonate.

In case of a spill drained to the sewer collect contaminated water in a suitable container and add 10% Sodium bisulphite solution. Contact supplier for further instructions.

## **7. Handling and Storage**

### **Information for safe handling:**

Ensure good exhaust ventilation at the workplace

It is preferable to handle the product in a closed system.

Prevent contamination of the inhaled air by heating up the product or forming aerosols.

Decant carefully, avoid splashes.

Compliance with the minimum requirements designed to guarantee a better standard of safety and health at work is essential to ensure the safety and health of workers.

### **Information about protection against explosion and fire:**

No special measure required.

### **Storage**

#### **Requirements to be met by storerooms and containers:**

Store only in original containers.

Information about suitable materials for vessels and piping can be requested from Solstar Europe Limited

### **Information about storage in a common storage facility:**

Store away from foodstuffs.

### **Further information about storage conditions:**

Keep containers tightly sealed

Prevent release to the environment by adequate secondary containment design and use of appropriate spill control procedures.

## **8. Exposure controls and personal protection:**

### **Additional information about design of technical systems:**

No further data see item 7.

### **Components with critical values that require monitoring at the workplace:**

None established.

### **Personal protective equipment**

#### **General protective and hygienic measures:**

Use skin cream for skin protection.

Avoid contact with the eyes and the skin.

Wash hands during work breaks and at the end of the shift.

Provide skin protection plan.



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Respiratory protection:

Respiratory protection is recommended in example substance concentrations exceeding the air limiting valve.  
Filter A/P2.

Protection of hands:



Chemical protective gloves according to DIN EN 374 with CE-labeling.

Check the condition of protective gloves after each use for any damages like holes, cuts or tears.  
Do not wear protective gloves longer than necessary.  
After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves:

Nitrile rubber, NBR

Penetration time of glove material:

Penetration time depends on different criteria and may be determined by the manufacturer according to the standard DIN 374-3.

Gloves made of the following materials are not suitable:

Gloves for mechanical protection do not provide protection against chemicals.

Eye Protection



Face Shield

Body protection:

Impervious protective clothing

Protective clothing.

Apron

Full head, face and neck protection

Risk management measures

The operators shall be instructed adequately.

The workplace shall be inspected regularly by competent personel e.g. the safety representative.

## 9 Physical and chemical properties:

General Information

Form:

Liquid

Colour:

Colourless to yellow

Odour:

Characteristic



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Change in condition

Melting Point / Melting range: Not determined

Boiling Point / Boiling range: 100°C

Flash point: Not applicable.

Self Inflammability: Product is not self igniting.

Danger of explosion: Product is not explosive.

Vapour pressure at 20°C: 23 mbar

Density at 20°C: 1.017-1.037 g/cm<sup>3</sup>

Solubility in / Miscibility

With Water: Fully miscible

pH-value at 20°C: 3.0 – 4.0

## **10 Stability and reactivity**

Conditions to be avoided:

Protect against temperatures > 60°C

Before handling, the product should not be diluted or mixed with other chemicals, in order to avoid any negative influences on the active ingredient(s).

Minimum shelf life: 18 months from production date, if stored at a temperature of about 20°C

Materials to be avoided:

Alkalis

Strong oxidizing agents

Reducing agents

Nucleophils

Dangerous reactions:

No dangerous reactions known.

Dangerous products of decomposition:

None, if storage and handling is done according to specification.



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## **11 Toxicological information**

### Acute toxicity:

LD/LC50 values that are relevant for classification

Oral	LD50	4467 mg/Kg (rat)
Dermal	LD50	>5000 mg/Kg (rat)

### Primary irritant effect:

On the skin: Caustic effect on skin and mucous membranes.

On the eye: Strong caustic effect

### Sensitization:

Sensitization possible by skin contact.

### Subacute to chronic toxicity:

Non mutagenic (Ames-test OECD 471: In vitro genmutation study in bacteria).

Non teratogenic (OECD 414 / EPA 83-3 a).

## **12 Ecological information:**

### Information about elimination (persistence and degradability):

Method OECD 301 D (closed-Bottle Test)

Analysing Method Oxygen Demand

Degree of elimination: The product ingredients can be readily eliminated in the sewage system.

### Biodegradability:

Degree of biological degradability: >60%

The components are readily biodegradable

### Behaviour in environmental systems:

#### Mobility and bioaccumulation potential:

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

Log Kow -0.71 - +0.75; CIT/MIT

### Ecotoxicological effects:

#### Aquatic toxicity:

EC50 / 48 hrs	8 mg/l (Daphnia)
IC50 72 hrs	1.67 mg/l (Selenastrum capricornutum)
LC50 / 96 hrs	14.8 mg/l (rainbow trout)

#### Behaviour in sewage processing plants

**55965-84-9 mixture of: 5-chloro-2methyl-4isotiazolin-3-one and 2-methyl-2H-isothiazol -3-one (3:1)**

EC50	7.9 mg/l (Activated Sludge) OECD 209
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Remark:

Depending on concentration, toxic effects on activated sludge organisms are possible.

Additional ecological information:

COD-value

16 mg o<sub>2</sub>/g product

AOX-indication:

Can affect the AOX-value of the effluent water. The active ingredient is not persistent, it is degraded under separation of the chlorine atom.

Calculated AOX value: 0.26%

The formulation contains the following heavy metals and their compounds according to Directive 2006/11/EC:

.None

General Notes:

The product contains materials that are harmful to the environment.

Avoid transfer to the environment.

### **13 Disposal considerations:**

Product:

Recommendation

Product must be disposed of according to local regulations pertaining to the disposal of hazardous waste.

European Waste catalogue	
16 00 00	Wastes not otherwise specified in the list
16 03 00	Off-specification batches and unused products
16 03 05	Organic wastes containing dangerous substances

Contaminated packaging:

Recommendation:

Remove all product from packaging and clean thoroughly before recycling.

Recommended cleaning agent:

Water, if necessary with cleaning agent.





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## **14 Transport information:**

Land transport ADR/RID (cross-border / domestic):



ADR / RID Class: 8 (C3) Corrosive substances.  
Kemler Number: 80  
UN-Number: 3265  
Packaging group: III  
Label 8  
Designation of goods: 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Mixture containing 5-Chloro-2-methyl-isothiazol-3-one and 2-Methyl -2H-isothiazol-3-one (3:1))  
Tunnel restriction code E

Maritime transport IMDG:



IMDG Class: 8  
UN Number: 3265  
Label 8  
Packing group III  
EMS Number: F-A,S-B  
Correct technical name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mixture containing 5-Chloro-2-methyl-isothiazol-3-one and 2-Methyl -2H-isothiazol-3-one (3:1))

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 8  
UN/ID Number: 3265  
Label: 8  
Packing Group: III



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Correct technical name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mixture containing 5-Chloro-2-methyl-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))

Remarks: Packing Instruction / Max. net weight  
Passenger aircraft: 818 / 5L  
Cargo aircraft: 820 /60L

## **15 Regulatory information**

### Designation according to EC guidelines:

The product has been classified and labelled in accordance with EC Directives / UK CHIP Regulations

### Code letter and hazard designation of product:



C Corrosive

### Hazard-determining components o labeling:

Glutaral

Mixture, containing 5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)

### Risk Phrases

34 Causes Burns.  
 43 May cause sensitisation by skin contact

### Safety Phrases:

26 In case of contact with eyes rinse immediately with plenty o water and seek medical advice.  
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 60 This material and its container must be disposed of as hazardous waste.  
 61 Avoid release to the environment. Refer to special instructions/safety data sheet.

### Identity of biocidal active substance according to EC directive 98/8/EC:

Mixture, containing 5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)

### National regulations

#### Information about limitation of use:

Take note of Directive 94/33/EC on the protection of young people at work.

Take note of Directive 92/85/EC on the safety and health of pregnant women at work.



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Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)  
Not listed in the COMAH regulation.

Indication of VOC according to Directive 1999/13 EG regarding the limitation of emissions of volatile organic compounds (VOC-Directive):

Due to the formulation, no volatile organic solvents, which may contribute to the VOC-value, are contained.

PCS-no. (IRL): 93759

## **16 Other information:**

This data is based on our current knowledge. However it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

R-phrases relevant to the product's hazardous ingredients:

23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
23/25	Toxic by inhalation and if swallowed.
34	Causes burns
43	May cause sensitisation by skin contact.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### Training hints

Further information regarding the directions for use can be found in the Product Data Sheet. Should you require any information regarding classification and registration of preparations containing this product please contact Solstar Europe Limited

Recommended application fields and dose levels for biocides:

In-can preservatives (PT 6): 0.5-4.0 g/Kg

Preservatives for liquid-cooling and processing systems (PT 11): 0.5-4.0 g/Kg

Slimicides (PT 12): 0.5-5.0 g/Kg