



Material Safety Data Sheet	Page: 1/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

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

Product Name: Solcide P112

Product Code

Use/Description of Product

Biocidal product for industrial and/or commercial use.

Company Name

Solstar Europe Limited
14 Egerton
High Legh, Knutsford
Cheshire, WA16 6PT

Office No : + 44 (0) 1925 753879
Mobile No : + 44 (0) 7809370170

Competent Person responsible for Safety Data Sheet

Richard Hirst, E-Mail: rjh@solstareurope.com

2. Hazard Identification

Classification of the substance or mixture

Classification according to directive 67/548/EEC or Directive 1999/45/EC



C Corrosive
R34: Causes burns



Xi Sensitising
R43 May Cause sensitization by skin contact.

Classification system:

The classification of health and environmental hazards is based either on test results or on the conventional calculation method according to articles 6 & 7 of directive 1999/45/EC (DPD).



Material Safety Data Sheet	Page: 2/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

Label Elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:



C Corrosive

Hazard determining components of labeling:

Mixture of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Risk Phrases

R34 Causes burns.
R43 May cause sensitization by skin contact.

Safety Phrases

26 In case of contact with eyes, rinse immediately with plenty of 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 sheets.

Other hazards

Results of PBT and vPvB assessment

PBT: this mixture does not contain substances that meet the PBT criteria of REACH, annex XIII
vPvB: This mixture does not contain substances that meet the vPvB criteria of REACH, annex XIII

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) T, C, Xi N; R 23/24/25-34-43-50/53	1.5%



Material Safety Data Sheet	Page: 3/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

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

If on skin (or hair):

Remove/Take off immediately all contaminated clothing immediately. Rinse skin with water/shower.

Destroy or thoroughly clean contaminated shoes.

If skin irritation or rash occurs: Get medical advice/attention.

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

After Eye Contact

If in eyes:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

After Swallowing

If swallowed

Rinse mouth. Do not induce vomiting.

Call a Poison Centre or doctor/physician if you feel unwell.

Bring vomiting person into recovery position.

Do not give anything by mouth to an unconscious person.

Information for the Doctor

Probable mucosal damage may contraindicate the use of gastric lavage.

Most important symptoms and effects, both acute and delayed

Allergic skin reaction.

Corrosive damage to gastro-intestinal tract.

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

Danger of gastric perforation

Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with activated carbon.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Rinse eyes thoroughly with physiological saline.



Material Safety Data Sheet	Page: 4/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

5. Fire Fighting Measures

Suitable extinguishing agents:

Water spray jet, extinguishing powder, CO₂, foam.

Unsuitable extinguishing agents for reasons of safety:

None

Special hazards arising from the substance or mixture:

In case of fire, toxic incineration products may be released such as:

Nitrogen Oxides (NO_x)

Carbon Monoxide (CO)

Sulphur Dioxide (SO₂)

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 precautions, protective equipment and emergency procedures

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.

Environmental precautions

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.

Methods and material for containment and clean up:

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.

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.



Material Safety Data Sheet	Page: 5/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

7. Handling and Storage

Precautions for safe handling:

Ensure good exhaust ventilation at the workplace

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

Load 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.

Conditions for safe storage, including any incompatibilities

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.

Additional information:

Information valid at the time of review of safety data sheet.

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.



Material Safety Data Sheet	Page: 6/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

Respiratory protection:

Use respiratory protection if the OEL is exceeded.
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:

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 personnel e.g. the safety representative.

9 Physical and chemical properties:

General Information

Form:

Liquid

Colour:

Colourless to yellow

Odour:

Mild



Material Safety Data Sheet	Page: 7/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

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: 1.015-1.035 g/cm³

Solubility in / Miscibility

With Water: Fully miscible

pH-value at 20°C: 3.0 – 4.0

10 Stability and reactivity

Conditions to be avoided:

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

Possibility of hazardous reactions

No dangerous reactions known.

Incompatible materials:

Alkalis

Strong oxidizing agents

Reducing agents

Nucleophiles

Hazardous decomposition products:

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

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.



Material Safety Data Sheet	Page: 8/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

On the eye: Strong caustic effect

Sensitization:

Sensitization possible by skin contact.

Sub-acute 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:

<u>Aquatic toxicity:</u>	
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)

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:

Bioaccumulative 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:

<u>Behaviour in sewage processing plants</u>	
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

Remark:

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



Material Safety Data Sheet	Page: 9/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

Additional ecological information:

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.

Results of PBT and vPvB assessment

PBT: This mixture does not contain substances that meet the PBT criteria of REACH annex XIII

vPvB This mixture does not contain substances that meet the vPvB criteria of REACH annex XIII

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.



Material Safety Data Sheet	Page: 10/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

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
Marine Pollutant: No
Segregation groups: Acids
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



Material Safety Data Sheet	Page: 11/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

Packing Group: III

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: 852 / 5L

Cargo aircraft: 856 /60L

Special precautions for user Warning: Corrosive substances.

15 Regulatory information

Designation according to EC guidelines:

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.

Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)

This substance/mixture is not subject to ordinance on industrial accidents (substance list, Annex I).

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): 93755

Chemical safety assessment: A chemical safety assessment has not been carried out.

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.

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



Material Safety Data Sheet	Page: 12/12
	Revision Nr: 0
	Date: 22/03/2011
Solcide P 112	Supersedes: 0/0/00

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