



SUMITOMO CHEMICAL (U.K.) PLC

SAFETY DATA SHEET SOLEIL®

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

1.1. Product identifier

Product name	SOLEIL®
Name	Bromuconazole 167 g/l / Tebuconazole 107 g/l, emulsifiable concentrate
GIFAP Code	EC
Synonyms; trade names	

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

Identified uses	Fungicide (agricultural use)
Uses advised against	Not for public use

1.3. Details of the supplier of the safety data sheet

Supplier	Sumitomo Chemical (UK) Plc Hythe House 200 Shepherds Bush Road Hammersmith London W6 7NL regulatory@scuk.sumitomo-chem.co.uk +44 (0)203 538 3099
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1.4. Emergency telephone number

Emergency telephone	+44 (0)1235 239670 (EU)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	None
Health hazards	Eye Dam. 1 - H318 Repr. 2 - H361d STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H304 May be fatal if swallowed and enters airways
H318 Causes serious eye damage
H336 May cause drowsiness or dizziness

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H361d Suspected of damaging the unborn child

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261: Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P501 (UK) Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

P501 (IE) Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple-rinsed empty containers which can be disposed of as non-hazardous waste.

Supplemental label information

EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

Special risks and safety precautions (Commission Regulation (EU) 547/2011):**General provisions**

SP 1: Do not contaminate water with the product or its container. (Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.)

Special risks and safety precautions (Commission Regulation (EU) 547/2011):**Specific safety precautions**

SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of 5 metres (as indicated on the label) to surface water bodies.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients**3.1. Substances**Classification according to
Regl 1272/2008**3.2 Mixtures**Classification according to
Regl 1272/2008

BROMUCONAZOLE 1-[(2RS,4RS:2RS,4SR)-4-bromo-2-(2,4-dichlorophenyl) tetrahydrofurfuryl]-1H-1,2,4-triazole	16.7%
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CAS number: 116255-48-2

EC number: 408-060-3

Classification

Acute Tox. 4 - H302

Repr. 2 - H361d

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

TEBUCONAZOLE (RS)-1-p-chlorophenyl-4,4-dimethyl-3-(1H-1,2,4-triazol-1-ylmethyl)pentan-3-ol	10.7%
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CAS number: 107534-96-3

EC number: 403-640-2

Classification

Acute Tox. 4 - H302

Repr. 2 - H361d

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Aquatic Chronic 2 - H411

TRIDECYL ALCOHOL ETHOXYLATED

> 1%

CAS number: 24938-91-8

Classification

Acute Tox. 4 - H302

Eye Dam. 1 - H318

BENZYL ALCOHOL

> 1%

CAS number: 100-51-6

Classification

Acute Tox. 4 - H302

Acute Tox. 4 - H332

Eye Irrit. 2 - H319

**BENZENESULFONIC ACID, MONO-C11-13-BRANCHED
ALKYL DERIVS., CALCIUM SALTS**

> 1%

CAS number: 70528-83-5

Classification

Acute Tox. 4 - H312

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Aquatic Chronic 2 - H411

**HYDROCARBONS, C10, AROMATICS, <1%
NAPHTHALENE**

> 10%

EC number: 918-811-1

Classification

Asp. Tox. 1 - H304

STOT SE 3 - H336

Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

Composition comments

All percentages displayed expressed as weight/weight.

Other information

Code ID : SCAE 0108 V2

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation

Move affected person to fresh air at once. If symptoms persist, seek medical advice.

Ingestion

Rinse mouth. Do NOT induce vomiting. Get medical attention

Skin contact

Remove contaminated clothing. Wash skin thoroughly with water. Seek medical advice if irritation develops

Eye contact

Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Always seek medical advice.

SOLEIL®**4.2. Most important symptoms and effects, both acute and delayed**

Human health May be fatal if swallowed and enters airways. Causes serious eye damage. Suspected of damaging the unborn child. May cause drowsiness or dizziness.

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

Notes for the doctor No specific recommendation.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media Dry chemical powder. Carbon dioxide (CO₂). Water. Foam.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards In case of fire: May emit toxic and corrosive fumes under fire conditions (carbon monoxide (CO), nitrous gases (NO_x), hydrogen bromide (HBr) and hydrogen chloride (HCl)).

5.3. Advice for firefighters

Protective actions during firefighting Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing and eye/face protection.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment, and emergency procedures**

For non-emergency personnel Avoid contact with skin and eyes. Wear protective gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area.

For emergency responders Avoid contact with skin and eyes. Wear protective nitrile gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area or consult an expert.

6.2. Environmental precautions

Environmental precautions Do not allow escape into sewage system or watercourses. Do not wash residues into drains or other waterways.

6.3. Methods and material for containment and cleaning up

Containment of a spill Do not allow escape into sewage system or watercourses.

Methods for cleaning up In case of spill (liquid) soak it up immediately with suitable absorbent such as sawdust or granular absorbent clay. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

6.4. Reference to other sections

Reference to other sections For personal protection see section 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Fire and explosion prevention Prevent electrostatic discharges. Above the flash point an explosive mixture can be formed (in presence of a flame).

Usage precautions Follow precautions for safe handling described in this safety data sheet. Avoid spilling. Do not allow to escape into sewage system or water courses.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Store in tightly-closed, original container in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke in work areas.

Other information Do not mix with water (except for the normal preparation). Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s) See label on the container.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Occupational exposure limits There is no national exposure limit for this product.
No chemical safety report is required for this kind of product.

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation.
Eye/face protection Wear safety goggles or face shield.
Hand protection Wear protective nitrile gloves.
Other skin and body protection Wear suitable protective clothing.
Hygiene measures Wash contaminated clothing before reuse.
Respiratory protection The usual precautions for handling chemicals should be observed. In case of insufficient ventilation wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Name Bromuconazole 167 g/l / Tebuconazole 107 g/l, emulsifiable concentrate
Appearance Liquid (visual inspection)
Colour Transparent dull yellow (In-house method)
Odour Chemical odour (In-house method)
Odour threshold Not determined
pH pH (diluted solution): 9.2 (1%) @ 23°C (CIPAC MT 75.3)
Melting point Not determined
Initial boiling point and range Not determined
Flash point 72°C (CIPAC MT 12.2)
Evaporation rate Not applicable
Flammability (solid, gas) Not flammable, due to the high flash point
Upper/lower flammability or explosive limits Not determined
Vapour pressure Not determined
Vapour density Not determined
Relative density 1.05 g/ml (at 20°C) (EEC A.3)
Bulk density Not applicable
Solubility(ies) Dispersible in water.
(Bromuconazole: Solubility: isomer cis; 60.9 mg/l, isomer trans; 20.8 mg/l @ 20°C)
(US EPA D 63-8 – EEC A.6 Elution column)
(Tebuconazole: Solubility: 36 mg/l @ 20°C)
Solubility in other solvents Not applicable
Partition coefficient Not determined. (Bromuconazole: log Pow = 3.24 @ 20°C) (OECD 107)
(Tebuconazole: log Pow = 3.7 @ 20°C)
Auto-ignition temperature 338°C (EEC A.15)
Decomposition temperature Bromuconazole shows an exothermic decomposition at 194°C
Viscosity Dynamic: 30.1 mPa.s @ 20°C (OECD 114)
Kinematic: 25.1953 mm²/s @ 20°C, 11.4289 mm²/s @ 40°C (OECD 114)
Explosive properties Not explosive. (EEC A.14)

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Oxidising properties Not oxidising. (Expert statement)

9.2. Other information

Relative vapour density (air = 1) Not determined

Surface tension 31.5 mN/m @ 20°C, 30.2 mN/m @ 40°C (EEC A.5)

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity Stable under recommended storage and handling conditions. See also section 7.

10.2. Chemical stability

Stability Stable for a minimum of 2 years under recommended storage and handling conditions. See section 7.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid Avoid high temperature, light, humidity.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products May emit toxic and corrosive fumes under fire conditions (carbon monoxide (CO), nitrous gases (NOx), hydrogen bromide (HBr) and hydrogen chloride (HCl)). See also section 5.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Name Bromuconazole 167 g/l / Tebuconazole 107 g/l, emulsifiable concentrate

Acute toxicity - oral

Acute toxicity - oral LD₅₀: >2000 mg/kg, Oral, Rat (OECD 401)

Acute toxicity - dermal

Acute toxicity - dermal LD₅₀: >2005 mg/kg, Dermal, Rat (OECD 402)

Acute toxicity - inhalation

Acute toxicity - inhalation Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Moderately irritating (OECD 404)

Serious eye damage/irritation

Serious eye damage/irritation Severely irritating (OECD 405)

Skin sensitisation

Skin sensitisation Buehler test (modified with 9 induction applications) - Guinea pig: Not sensitising. (OECD 406)

Toxicological information on ingredients

Name Active substance; Bromuconazole, technical grade

Acute toxicity - inhalation

Acute toxicity - inhalation LC₅₀, 4 hours: > 5.05 mg/l, nose only, Inhalation, Rat (OECD 403)

Germ cell mutagenicity

Genotoxicity – in vitro All tests negative, except chromosome aberration test weakly positive with metabolic activation (OECD 471, 473, 476, US EPA 40 CFR §798.5550)

Genotoxicity – in vivo Negative (OECD 474, EEC B.18)

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<u>Carcinogenicity</u>	
Carcinogenicity	(rats, mice): No carcinogenic effect. (US EPA guideline No. 83-5, 83-2)
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Multigeneration study: Negative. Rat (OECD 416)
Reproductive toxicity - development	Teratogenicity: Oral route: negative in rabbits; in rats, some effects observed at maternally toxic levels (EEC B.31, US EPA 83-3) Dermal route: negative in rats (US EPA 83-3)
Name	Active substance; Tebuconazole, technical grade
<u>Acute toxicity - inhalation</u>	
Acute toxicity - inhalation	LC ₅₀ , 4 hours: > 5.1 mg/l (respirable dust), Inhalation, Rat
<u>Germ cell mutagenicity</u>	
Genotoxicity – in vitro	Negative
Genotoxicity – in vivo	Negative
<u>Carcinogenicity</u>	
Carcinogenicity	(rats, mice): No carcinogenic effect.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Multigeneration study: Negative. Rat
Reproductive toxicity - development	Teratogenicity: Teratogenic, possible risk of harm to the unborn child.
General information	Based on the available data, classification criteria are met for the irritation class (eye) and the teratogenic effects.
Route of exposure	This product is for agricultural use; therefore, the most probable routes of exposure are via skin or inhalation.

SECTION 12: Ecological information**12.1. Toxicity**

Name	Bromuconazole 167 g/l / Tebuconazole 107 g/l, emulsifiable concentrate
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 10.44 mg/l, <i>Onchorhynchus mykiss</i> (Rainbow trout) (OECD 203)
Acute toxicity - aquatic invertebrates	EC ₅₀ 48 hours: 21.9 mg/l <i>Daphnia magna</i> (OECD 202)
Acute toxicity - algae	ECr ₅₀ 72 hours: 0.350 mg/l, <i>Scenedesmus subspicatus</i> ECb ₅₀ , 72 hours: 0.096 mg/l, <i>Scenedesmus subspicatus</i> NOEC, 72 hours: 0.005 mg/l, <i>Scenedesmus subspicatus</i> (OECD 201)
<u>Acute toxicity - terrestrial</u>	
Acute toxicity - terrestrial	LD ₅₀ , 48 hours, oral: >80 µg/bee <i>Apis mellifera</i> (Honeybee) (OECD 213) LD ₅₀ , 48 hours, contact: >100 µg/bee <i>Apis mellifera</i> (Honeybee) (OECD 214) LC ₅₀ , 14 days: >988 mg/kg soil, <i>Eisenia foetida</i> (Earthworm) (OECD 207)
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 1.95 mg/l, <i>Daphnia magna</i> (OECD 211)
<u>Ecological information on ingredients</u>	
Name	Active substance; Bromuconazole, technical grade
<u>Acute aquatic toxicity</u>	
Acute toxicity – aquatic plant	EC ₅₀ 14d: 0.12 mg/l, <i>Lemna gibba</i> NOEC, 14d: 0.027 mg/l, <i>Lemna gibba</i> (US EPA FIFRA 122-2 & 123-2)
<u>Acute toxicity - terrestrial</u>	
Acute toxicity - terrestrial	LD ₅₀ , oral: >2150 mg/kg bw, <i>Colinus virginianus</i> (Bobwhite quail) (US EPA FIFRA 71-1) LD ₅₀ , oral: >2150 mg/kg bw, <i>Anas platyrhynchos</i> (Mallard duck) (US EPA FIFRA 71-1) No significant impact on carbon mineralization or nitrogen transformation at up to 0.667 mg as/kg dry soil, Soil microorganisms (EPPO 1994)

SOLEIL®**Chronic aquatic toxicity****Chronic toxicity - aquatic invertebrates**NOEC, 28 days: 0.25 mg/l, *Chironomus riparius* (Sediment dwelling midge) (BBA 1995)**Name**

Active substance; Tebuconazole, technical grade

Acute aquatic toxicity**Acute toxicity – aquatic plant**EC₅₀ 14d: 0.144 mg/l, *Lemna gibba*
NOEC, 14d: 0.0623 mg/l, *Lemna gibba***Acute toxicity - terrestrial****Acute toxicity - terrestrial**LD₅₀, oral: 1988 mg/kg bw, *Colinus virginianus* (Bobwhite quail)
LD₅₀, oral: >2912 mg/kg bw, *Coturnix japonica* (Japanese quail)**Chronic aquatic toxicity****Chronic toxicity - aquatic invertebrates**NOEC, 28 days: 1.33 mg/l, *Chironomus riparius* (Sediment dwelling midge)**12.2. Persistence and degradability****Ecological information in ingredients****Name**

Active substance; Bromuconazole, technical grade

Biodegradation

Not readily biodegradable (OECD 301B - modified Sturm test)

Stability (hydrolysis)

Hydrolytically stable: (pH 4, 5, 7, 9) (EPA FIFRA § 161-1)

Biological methods for sewage treatment3h-EC₅₀ activated sludge: > 1000 mg/L (OECD 209)**Name**

Active substance; Tebuconazole, technical grade

Biodegradation

Not readily biodegradable

Stability (hydrolysis)

Hydrolytically stable: (pH 4, 7, 9 @ 22°C)

12.3. Bioaccumulative potential**Ecological information on ingredients****Name**

Active substance; Bromuconazole, technical grade

Bioaccumulative potentialBCF: exposure 28 days; 131 (whole fish), 227 (viscera), CT₅₀, depuration time; approx. 0.4 day. *Lepomis macrochirus* (Bluegill sunfish) (U.S. E.P.A. FIFRA 165-4)**Partition coefficient**

log Pow: 3.24 @ 20°C (OECD 107)

Name

Active substance; Tebuconazole, technical grade

Partition coefficient

log Pow: 3.7 @ 20°C

12.4. Mobility in soil**Ecological information on ingredients****Name**

Active substance; Bromuconazole, technical grade

Mobility

Low mobility

Adsorption/desorption coefficientSoil Adsorption,
Koc: isomer LS850646: 474-1086 mL/g (mean 757 mL/g, 1/n = 0.78-0.85, 4 soils)
Koc: isomer LS850647: 627-1539 mL/g (mean 987 mL/g, 1/n = 0.76-0.86, 4 soils)
Soil Desorption, the sorption process was not entirely reversible (US EPA 163.1)**Name**

Active substance; Tebuconazole, technical grade

Mobility

Low mobility

Adsorption/desorption coefficient

Soil Adsorption, Kfoc: 128.4 to 1249 mL/g (mean 769 mL/g (1/n = 0.71 – 1.2)

12.5. Results of PBT and vPvB assessment**Ecological information in ingredients****Name**

Active substance; Bromuconazole, technical grade

Results of PBT and vPvB

Not required (no chemical safety report required).

SOLEIL®**assessment**

Name Active substance; Tebuconazole, technical grade
Results of PBT and vPvB assessment Not required (no chemical safety report required).

12.6. Other adverse effects**Ecological information in ingredients**

Name Active substance; Bromuconazole, technical grade
Other adverse effects No other known adverse effects on the environment.

Name Active substance; tebuconazole, technical grade
Other adverse effects No other known adverse effects on the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Disposal methods According to local regulations. For further advice, contact manufacturer.

SECTION 14: Transport information**14.1. UN Number**

UN No. (ADR/RID) 3082
UN No. (IMDG) 3082
UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) Environmentally hazardous substance, LIQUID, n.o.s. (Contains: Bromuconazole and Tebuconazole)
Proper shipping name (IMDG) Environmentally hazardous substance, LIQUID, n.o.s. (Contains: Bromuconazole and Tebuconazole)
Proper shipping name (ICAO) Environmentally hazardous substance, LIQUID, n.o.s. (Contains: Bromuconazole and Tebuconazole)

14.3. Transport hazard class(es)

ADR/RID class 9
ADR/RID label 9
IMDG class 9
ICAO class/division 9

14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

**14.6. Special precautions for user**

No other special precaution required.

EmS F-A, S-F

SOLEIL®**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code**

Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code	Not applicable
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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU legislation	There is no specific regulation/legislation for this mixture.
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15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

SECTION 16: Other information

Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the purpose of classification	Classification based on; tests, properties of the active substance(s), ingredients.
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Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)
 Asp. Tox. = Aspiration hazard
 Eye Dam. = Serious eye damage
 Eye Irrit. = Eye irritation
 Flam. Liq. = Flammable liquid
 Skin Irrit. = Skin irritation
 Skin Sens. = Skin sensitisation
 STOT RE = Specific target organ toxicity-repeated exposure
 STOT SE = Specific target organ toxicity-single exposure

Abbreviations and acronyms Used in the safety data sheet

ASTM : American Society for Testing Material
 CAS: Chemical Abstracts Service.
 CFR : Code of Federal Regulations
 CLP : Classification, Labelling and Packaging
 EC : European Community
 EEC : European Economic Community
 EPA : Environmental Protection Agency (USA)
 EPPO : European and Mediterranean Plant Protection Organization
 EU : European Union
 GIFAP : International Group of National Associations of manufacturers of Agrochemical Products
 GHS: Globally Harmonized System.
 ID : identification
 i.e. : shortening of the Latin expression id est, which is translated as "that is."
 OECD : Organisation for Economic Co-operation and Development
 PBT: Persistent, Bioaccumulative and Toxic substance.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 Regl : Regulation
 US EPA : United States Environmental Protection Agency
 vPvB: Very Persistent and Very Bioaccumulative.
 w/w : weight per weight
 FIFRA : Federal Insecticide, Fungicide and Rodenticide Act of 1972
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 LC₅₀: Lethal Concentration to 50 % of a test population.
 EC₅₀: 50% of maximal Effective Concentration.
 NOEC: No Observed Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 ECb50 : 50% of maximal Effective Concentration on biomass.
 NOECb : No Observed Effect Concentration on biomass.
 EC50fd : 50% of maximal Effective Concentration on frond density.
 NOECfd : No Observed Effect Concentration on frond density.

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DT₅₀ : degradation time for 50% of a compound

log Pow : Octanol-water partition coefficient.

Koc : organic carbon adsorption coefficient

BCF: Bioconcentration Factor.

UN: United Nations.

No. : number

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

IMDG: International Maritime Dangerous Goods.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

N.O.S. : Not Otherwise Specified

EmS : Emergency Response Procedures for Ships Carrying Dangerous Goods

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

SDS : Safety Data Sheet

CT50 : clearance time

EC₅₀ : 50% of maximal Effective Concentration on growth rate and biomass.

ECr₅₀ : 50% of maximal Effective Concentration on growth rate.

NOECr : No Observed Effect Concentration on growth rate.

NOECr_b : No Observed Effect Concentration on growth rate and biomass.

Vol. = volume

CIPAC : Collaborative International Pesticides Analytical Council

USP : United States Pharmacopeia

SETAC: Society of Environmental Toxicology And Chemistry

OPPTS : Office of Prevention, Pesticides & Toxic Substances

a.s. : active substance

bw: bodyweight

MAFF : Ministry of Agriculture, Forestry and Fisheries (Japan)

ISO : International Organization for Standardization

v/v : volume per volume

w/v : weight per volume

BBA : Biologische Bundes Ansladt für Land und Fortwirtschadt (German Federal Biological Research Centre for Agriculture and Forestry)

subsp. = subspecies

cfu : colony-forming unit

EC : Emulsifiable concentrate

Revision comments

Sections were modified as follows: identity of the company/undertaking.

Hazard statements in full

H225: Highly flammable liquid and vapour

H312: Harmful in contact with skin.

H315: Causes skin irritation

H318: Causes serious eye damage

H304: May be fatal if swallowed and enters airways

H302: Harmful if swallowed

H319: Causes serious eye irritation

H332: Harmful if inhaled

H336: May cause drowsiness or dizziness

EUH066: Repeated exposure may cause skin dryness or cracking

H361d: Suspected of damaging the unborn child.

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

H411: toxic to aquatic life with long lasting effects

Reference of the SDS

Based on SOLECCLP/EU/310gb from SCAE

This information only concerns the above mentioned product for the specific use mentioned and is not valid for such product used in combination with any other product. The information is to our best present knowledge correct and complete and is given in good faith as of the date indicated. It is the user's responsibility to use this information as appropriate for his own particular use of this product.