

## SumiShield 50WG

SDS No. TQ2720D

Spec ID: 900000053287 (LHTV00830)

Revision Date: 2016/02/17

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SumiShield 50WG

Limitations on use : Sample

## Manufacturer or supplier's details

Company : SUMITOMO CHEMICAL COMPANY, LIMITED  
 Department / Section : Environmental Health Division, Marketing Dept.- International  
 27-1, Shinkawa 2-chome, Chuo-ku, Tokyo, 104-8260, Japan  
 Telephone : +81-3-5543-5622  
 Telefax : +81-3-5543-5947  
 Emergency telephone : SUMITOMO CHEMICAL COMPANY, LIMITED  
 number : +81-3-5543-5622  
 or  
 SUMITOMO CHEMICAL (UK) plc  
 +44-203-538-3099

## Recommended use of the chemical and restrictions on use

Restrictions on use : Insecticide, sample

## 2. HAZARDS IDENTIFICATION

## GHS classification:

<b>Physical hazards</b>	Explosives	Not applicable
	Flammable gases	Not applicable
	Flammable aerosols	Not applicable
	Oxidizing gases	Not applicable
	Gases under pressure	Not applicable
	Flammable liquids	Not applicable
	Flammable solids	Not classified
	Self-reactive substances and mixtures	Not applicable
	Pyrophoric liquids	Not applicable
	Pyrophoric solids	Not classified
	Self-heating substances and mixtures	Classification not possible
	Substances and mixtures, which in contact with water, emit flammable gases	Not classified
	Oxidizing liquids	Not applicable
	Oxidizing solids	Not applicable
Organic peroxides	Not applicable	
Corrosive to metals	Classification not possible	
<b>Health hazards</b>	Acute toxicity (Oral)	Category 5
	Acute toxicity (Dermal)	Not classified
	Acute toxicity (Inhalation - gas)	Not applicable
	Acute toxicity (Inhalation - vapour)	Not applicable
	Acute toxicity (Inhalation - dust and mist)	Category 4
	Skin corrosion/irritation	Category 3
	Serious eye damage/eye irritation	Category 2B
	Respiratory sensitizer	Classification not possible
	Skin sensitizer	Not classified
	Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible	
Toxic to reproduction	Classification not possible	

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	Specific target organ toxicity - single exposure	Category 1 (Nervous System)
	Specific target organ toxicity - repeated exposure	Category 2 (Ovaries, Blood)
	Aspiration hazard	Classification not possible
<b>Environmental hazards</b>	Acute hazards to the aquatic environment	Category 1
	Chronic hazards to the aquatic environment	Category 1
	Hazardous to the ozone layer	Classification not possible

## GHS label elements

## Symbol(s):



## Signal words:

Danger

## Hazard Statement(s):

H303 May be harmful if swallowed  
 H332 Harmful if inhaled  
 H316 Cause mild skin irritation  
 H320 Cause eye irritation  
 H370 Cause damage to nervous system  
 H373 May cause damage to ovaries and blood  
 H400 Very toxic to aquatic life  
 H410 Very toxic to aquatic life with long lasting effects

## Precautionary statement

## Prevention:

P312 Call a POISON CENTER if you feel unwell  
 P261 Avoid breathing dust  
 P271 Use only outdoors or in a well-ventilated area  
 P264 Wash hand thoroughly after handling  
 P260 Do not breathe dust.  
 P273 Avoid release to the environment

## Response:

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+313 If eye irritation persists: Get medical advice  
 P308+311 If exposed or concerned: Call POISON CENTER  
 P314 Get medical advice if you feel unwell  
 P391 Collect spillage

## Storage:

P405 Store locked up.

## Disposal:

P501 Dispose of contents/container appropriately in accordance with local/regional/national/international regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS Number	Weight/ Percent
Clothianidin	210880-92-5	50

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Hydrated amorphous silica	7631-86-9	0.5 – 1.1
Others	non-disclosure	47 - 50

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document.

**4. FIRST AID MEASURES**

- If inhaled : Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
- In case of skin contact : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- In case of eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- If swallowed : Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Notes to physician : None

**5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical powder, carbon dioxide, foam.
- Unsuitable extinguishing media : None known
- Flash point °F : Not Applicable
- Autoignition : > 150° C (the technical material decomposes at 150° C)  
Self-Ignition temperature: 208° C
- Flammable limits in air – Lower (%) : Not applicable
- Flammable limits in air – Upper (%) : Not applicable
- Fire fighting instructions: : Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment,

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including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal.

Decontaminate personal protective equipment and fire fighting equipment before reuse. This material is combustible.

Hazardous decomposition products : May emit toxic gases and irritating fumes under fire conditions.

NFPA RATING : Health : 1  
Flammability : 0  
Reactivity : 0  
Special : None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions : Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water.

Containment and cleaning up for spills on land : Reduce airborne dust. Avoid runoff into storm sewers or other bodies of water.  
Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container.  
Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

Containment and cleaning up for spills in water : This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.  
Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

**7. HANDLING AND STORAGE**

Handling : Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed.  
Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

Keep container tightly closed. Keep container in a cool well ventilated area. Stable at normal temperatures and storage conditions in closed original package.

Use only in well ventilated area. Avoid contact with skin and eyes. Do not breath dust.

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Storage : Do not contaminate water, food, or feed by storage or disposal. Store product in original container in a cool, dry area away from children, pets and direct sunlight. Do not use or store near heat or open flame. Do not store near food or feed. Protect from excessive heat.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

Respiratory protection : Use this material only in well ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended. In case of dust formation use a dust mask.

Skin and hand protection : Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves.

Eye and face protection : Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

Engineering measures : Use in a well ventilated area.

## Exposure Limits

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Clothianidin	None	None	None
Hydrated amorphous silica	10 mg/m <sup>3</sup> (total amorphous dust)  3 mg/m <sup>3</sup> (respirable nuisance particulate)	6 mg/m <sup>3</sup> (total dust)	None
Others	None	None	None

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : Solid

Appearance : Granules

Color : Light tan

Odor : Odorless

Odor threshold : No information available

pH : 6.4 (26 – 27 °C)

Melting point/freezing point : 176.8 °C (technical)

Boiling point and boiling range : No information available

Flash point : Not applicable

Evaporation rate : No information available

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Flammability (solid, gas)	: No information available
Flammability Limits in Air	
Upper flammability limits	: Not applicable
Lower flammability limit	: Not applicable
Vapor pressure	: $1.3 \times 10^{-10}$ Pa (25 °C, technical)
Vapor density	: No information available
Specific gravity	: 1.61 (20 °C, technical)
Water solubility	: Dispersible in water
Solubility in other solvents	: No information available
Partition coefficient	log Pow = 0.7 (25 °C, technical)
Auto-ignition temperature	: >150° C
Decomposition temperature	: 150° C (technical)
Viscosity	: No information available
Explosive properties	: No information available
Oxidizing properties	: No information available
Density	: No information available
Bulk density	: 37.4 lb/ft <sup>3</sup> (20 °C)

**10. STABILITY AND REACTIVITY**

Reactivity	: No data available.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: None under normal processing.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: None known based on information supplied.
Hazardous decomposition products	: May emit toxic fumes under fire conditions.

**11. TOXICOLOGICAL INFORMATION****Acute Toxicity:**

Oral Toxicity LD <sub>50</sub> (rats)	3900 mg/kg (male) 4700 mg/kg (female)	EPA Tox Category III
Dermal Toxicity LD <sub>50</sub> (rats)	> 5000 mg/kg	EPA Tox Category IV
Inhalation Toxicity LC <sub>50</sub> (rats)	> 2.3 mg/L	EPA Tox Category IV
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category III
Skin Irritation (rabbits)	Slightly irritating	EPA Tox Category IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category Not applicable

## Carcinogen Classification

Chemical Name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
Clothianidin	Not listed	Not listed	Not listed
Hydrated amorphous	Group 3	Not listed	Not listed

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silica			
Others	Not listed	Not listed	Not listed

**TOXICITY OF CLOTHIANIDIN TECHNICAL**

**SUBCHRONIC:** The NOEL in a 3-month rat feeding study with Clothianidin Technical was 27.9 mg/kg/day (male) and 34.0 mg/kg/day (female). The NOEL in a 90-day dog feeding study was 19.3 mg/kg/day (male) and 21.2 mg/kg/day (female). In a subchronic dermal study with rats, the NOAEL is > 1,000 mg/kg/day.

**CHRONIC/CARCINOGENICITY:** The Clothianidin NOEL for a 2-year rat study was 9.7 mg/kg/day (female); for a 18-month mouse study was 47.2 mg/kg/day (male) and for a 12-month dog study was 7.8 mg/kg/day (male). The principal target organs were the glandular stomach, kidney, ovary, and liver. No oncogenic effects were observed in the 2-year rat or 18-month mouse feeding studies.

**DEVELOPMENTAL TOXICITY:** Transient developmental effects (delayed ossification) were observed in rabbits at maternally toxic doses (100 mg/kg/d). The technical material is fetotoxic in animal studies at maternally toxic doses. No teratogenic effects on rats or rabbits were observed.

**REPRODUCTION:** No reproductive effects were observed in rats at the highest dose tested (2500 ppm).

**MUTAGENICITY:** *In vivo* tests have demonstrated that the technical material is not mutagenic. Some *in-vitro* tests were positive for mutagenicity. The observed effects *in-vitro* were due to cytotoxic effects. The weight-of-evidence from the *in vivo* whole animal tests suggest that this product does not present a mutagenic hazard.

**SPECIFIC TARGET ORGAN: Single exposure:** Rat neurotoxicity study (oral), nervous system.  
**Repeated exposure:** Rat 2-year chronic toxicity study (diet), blood and ovaries, Dog 90-day repeated dose toxicity study (diet): blood, and Dog 1-year chronic toxicity study (diet): Blood

**12. ECOLOGICAL INFORMATION****AVIAN TOXICITY:**

The following results were obtained from studies with Clothianidin Technical:

- LD<sub>50</sub> Japanese quail: = 430 mg/kg
- LD<sub>50</sub> Northern bobwhite: > 2000 mg/kg
- LC<sub>50</sub> Northern bobwhite: > 5200 ppm
- LC<sub>50</sub> Mallard duck: > 5200 ppm

**AQUATIC ORGANISM TOXICITY:**

This product is toxic to aquatic invertebrates. The following are results from testing of Clothianidin Technical:

- Bluegill 96 hr. LC<sub>50</sub>: > 120 mg/L
- Rainbow trout 96 hr. LC<sub>50</sub>: > 100 mg/L
- Sheepshead minnow 96 hr. LC<sub>50</sub>: > 100 mg/L
- Water flea 48 hr. EC<sub>50</sub>: 40 mg/L
- Mysid 96 hr. LC<sub>50</sub>: = 0.053 mg/L
- Algae 72 hr. ErC<sub>50</sub>: > 120 mg/L
- Partition coefficient: log Pow=0.7 (25 °C); Degradation in soil: DT<sub>50</sub>: >140 days

**OTHER NON-TARGET ORGANISM TOXICITY:**

The following information is based on Clothianidin Technical:  
 Honeybee 48-hour oral LD<sub>50</sub>: = 0.0037ug (microgram)/bee

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Honeybee 48-hour contact LD 50 : = 0.044 ug (microgram)/bee  
Earthworm 7-day LC 50 : = 19 mg/kg dry soil

**13. DISPOSAL CONSIDERATIONS**

- PRODUCT DISPOSAL** : To avoid waste, use all material in the container by application according to label directions. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- DISPOSAL METHODS** : Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

**14. TRANSPORT INFORMATION**

- ICAO/IATA NAME**      **SHIPPING** UN 3077 Environmentally Hazardous Substance, Solid, N.O.S. (sample), 9, III, Marine Pollutant
- REMARKS**                      Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from dangerous goods regulations -- see UN Special Provision 375.
- IMDG SHIPPING NAME**      UN 3077 Environmentally Hazardous Substance, Solid, N.O.S. (sample), 9, III, Marine Pollutant
- EMS NO.**                              F-A, S-F

**15. REGULATORY INFORMATION**

Please follow local regulations.

**16. OTHER INFORMATION**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.