



**SAFETY DATA SHEET**

According to Regulation (EC) No 1907/2006 (REACH) and Commission Regulation (EU) No 453/2010

**CLOTHIANIDIN 50 WG**

Ref. CN50WGV2CLP/EU/320gb

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**  
Clothianidin, 500 g/kg water dispersible granules  
GIFAP Code: WG  
EC number: not applicable

**1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Systemic insecticide (agricultural use)  
Not for public use

**1.3. Details of the supplier of the safety data sheet**  
SUMITOMO CHEMICAL AGRO EUROPE S.A.S.  
Parc d'Affaires de Crécy  
2, rue Claude Chappe  
69370 Saint-Didier-au-Mont-d'Or  
France  
Tel.: +33 (0) 478 64 32 60  
email: [sds@sumitomo-chem.fr](mailto:sds@sumitomo-chem.fr)



**1.4. Emergency Telephone number 24/24hrs**  
Europe +44 (0) 1235 239 670  
Middle East & Africa +44 (0) 1235 239 671

**2. HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

Classified as hazardous according to regulation (EC) No 1272/2008 (CLP)

**Signal word(s)**

Warning

**Pictogram (s)**



Acute oral Cat 4  
Skin sens. Cat 1B

Aquatic Acute Cat 1  
Aquatic Chronic Cat 1

**Hazard statement(s)**

H302: Harmful if swallowed.  
H317: May cause an allergic skin reaction.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.

**2.2. Label elements**

**Signal word(s)**

Warning

**Pictogram (s)**



Acute oral Cat 4  
Skin sens. Cat 1B

Aquatic Chronic Cat 1

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<b>Hazard statement(s)</b>	H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H410: Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement(s)</b>	P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P363: Wash contaminated clothing before reuse. P302 + P352: IF ON SKIN: Wash with plenty of water. P391: Collect spillage. P501: Dispose of contents/container in accordance with local regulation. EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.
<b>Special risks and safety precautions (Commission Regulation (EU) 547/2011):</b>	
<b>General provisions</b>	SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).
<b>Specific safety precautions</b>	SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of ( <i>as indicated on the label</i> ) to surface water bodies.
<b>2.3. Other hazards</b>	None known

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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**3.2. This product is to be considered as a mixture in conformance to EU regulations.****Composition/Information on hazardous ingredients or with exposure limits**

Number	% w/w	CAS number	Chemical name
1	50	210880-92-5 (Formerly 205510-53-8)	(E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine
2	≥ 10	91053-39-3	calcinated diatomaceous earth
3	≥ 10	68937-98-4	Sulfonic acids, C14-18-alkane hydroxy and C12-20-alkapolyene and C14-18-alkene and C12-20-alkene hydroxy, sodium salts

Number	EC number	Annex-1 listing	Regl 1272/2008 Pict.	Hazard statements
1	Not assigned	yes	GHS07, GHS09	H302, H400, H410
2	/	/	none	none
3	/	/	GHS05	H314, H318

Other information                      The product contains ≤0.04% dust of respirable crystalline silica (see section 9)  
SCAE code: P05-8 V2.00

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**4. FIRST AID MEASURES**

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**4.1. Description of first aid measures**

<b>General</b>	In all cases of doubt, seek medical attention.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>Skin</b>	Remove contaminated clothing. Wash skin immediately with water.
<b>Eye</b>	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
<b>Ingestion</b>	Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical advice.

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

Harmful if swallowed. May cause an allergic skin reaction. Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

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

No specific recommendations.

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**5. FIRE-FIGHTING MEASURES**

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**5.1. Extinguishing media****Suitable extinguishing media**

Dry chemical powder, carbon dioxide, foam.

**Unsuitable extinguishing media**

none known

**5.2. Special hazards arising from the substance or mixture**May emit toxic and corrosive fumes under fire conditions (hydrochloric acid (HCl), hydrogen cyanide (HCN), carbon monoxide (CO) and nitrous gases (NO<sub>x</sub>)).**5.3. Advice for fire-fighters**

Wear self contained breathing apparatus. Wear suitable protective clothing and eye/face protection.

**Other information**

Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

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**6. ACCIDENTAL RELEASE MEASURES**

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**6.1. Personal precautions, protective equipment, and emergency procedures****For non-emergency personnel**Do not breathe dust. Wear protective gloves, safety goggles or face shield, and suitable protective clothing.  
Remove of ignition sources.  
Evacuate the danger area.**For emergency responders**Do not breathe dust. Wear protective gloves (nitrile), safety goggles or face shield, and suitable protective clothing.  
Remove of ignition sources.  
Evacuate the danger area or consult an expert.**6.2. Environmental precautions**

Do not allow to escape into sewage system or water courses. 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 to escape into sewage system or water courses.

**Clean-up procedures**

Clean up spills immediately. 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**

For personal protection see section 8.

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**7. HANDLING AND STORAGE**

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**7.1. Precautions for safe handling**

The usual precautions for handling chemicals should be observed. For personal protection see section 8.

**Fire and explosion prevention**

May form explosive dust cloud.

**7.2. Conditions for safe storage, including any incompatibilities****Storage requirements**

Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feeding stuffs. Do not drink, eat and smoke in work areas.

**Other information**

Do not mix with water (except for the normal preparation).

**7.3. Specific end use(s)**

see label on the container.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**8.1. Control parameters**

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

**8.2. Exposure controls**

<b>Appropriate engineering controls</b>	Provide adequate ventilation.
<b>Individual protection measures</b>	
<b>Respiratory</b>	In case of dust formation, use dust mask.
<b>Hand</b>	Wear protective gloves of nitrile.
<b>Eye</b>	Wear safety goggles or face shield.
<b>Skin and body</b>	Wear suitable protective clothing.
<b>Other information</b>	Launder clothes before reuse.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1. Information on basic physical and chemical properties**

<b>Name</b>	<i>Clothianidin, 500 g/kg water dispersible granules</i>
<b>Appearance</b>	solid, small, sand-like granules (US EPA OPPTS 830.6303)
<b>Dust content</b>	classified as "nearly dust free" ( $\leq 0.04\%$ dust)
<b>Colour</b>	light tan (US EPA OPPTS 830.6302)
<b>Odour</b>	odourless (US EPA OPPTS 830.6304)
<b>Odour threshold</b>	not determined
<b>pH value</b>	7 - 9 (1% dispersion in water, 23°C) (CIPAC MT 75.3)
<b>Melting point/freezing point</b>	not determined
<b>Initial boiling point &amp; boiling range</b>	not applicable
<b>Flash point</b>	not applicable
<b>Evaporation rate</b>	not applicable
<b>Flammability</b>	not "highly flammable" (EEC A.10)
<b>Upper/lower flammability or explosive limits</b>	not determined
<b>Vapour pressure</b>	not applicable
<b>Vapour density</b>	not applicable
<b>Relative density</b>	not determined
<b>Bulk density</b>	0.5 g/ml (CIPAC MT 169, CIPAC MT 186)
<b>Solubility in water</b>	dispersible in water (solubility of Clothianidin = 0.327 g/l; 20°C) (OECD 105, shake flask method)
<b>Solubility in other solvents</b>	not applicable
<b>Partition coefficient n-octanol/water</b>	not applicable (Clothianidin: log Pow = 0.7; 25°C) (OECD 117)
<b>Autoignition temperature</b>	208°C (EEC A.16)
<b>Decomposition temperature</b>	the active substance does not decompose up to 400°C (EEC A.16)
<b>Dynamic viscosity</b>	not applicable
<b>Kinematic viscosity</b>	not applicable
<b>Explosive properties</b>	not explosive (EEC A.14)
<b>Oxidising properties</b>	not oxidising (EEC A.17)
<b>9.2. Other information</b>	
<b>Relative vapour density (air = 1)</b>	not applicable
<b>Surface tension</b>	not determined

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**10. STABILITY AND REACTIVITY**

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**10.1. Reactivity** Stable under recommended storage and handling conditions (see also section 7).

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<b>10.2. Chemical stability</b>	Stable for a minimum of 2 years under recommended storage and handling conditions (see section 7).
<b>10.3. Possibility of hazardous reactions</b>	None known.
<b>10.4. Conditions to avoid</b>	Avoid high temperature, light, humidity.
<b>10.5. Incompatible materials</b>	None known.
<b>10.6. Hazardous decomposition products</b>	May emit toxic and corrosive fumes under fire conditions (hydrochloric acid (HCl), hydrogen cyanide (HCN), carbon monoxide (CO) and nitrous gases (NOx)). See also section 5.

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**11. TOXICOLOGICAL INFORMATION**

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**11.1. Information on toxicological effects****Name** *Clothianidin, 500 g/kg water dispersible granules***Acute toxicity**

<b>Oral</b>	LD50 rat: female = 1628 mg/kg - male > 1710 mg/kg (OECD 401)
<b>Dermal</b>	LD50 rat: >2000 mg/kg (OECD 402)
<b>Inhalation</b>	LC50 rat (4 hours): > 5.66 mg/l (nose-only) (OECD 403)
<b>Irritation</b>	
<b>Skin</b>	not irritating (OECD 404)
<b>Eye</b>	mildly irritating (OECD 405)
<b>Sensitization</b>	sensitizing (Maximisation test) (OECD 406)

The following data are applicable to the ingredient listed below:

<b>Name</b>	<b>Active substance Clothianidin, technical grade</b>
<b>Other toxicological information</b>	- Acute neurotoxicity (rat): NOAEL = 60 mg/kg (US EPA 81-8) - 90d-neurotoxicity (rat): NOAEL = 60 mg/kg bw/day (US EPA 81-8) - Genotoxicity, <i>in vivo</i> and <i>in vitro</i> tests: not genotoxic (OECD no. 471, 473, 476, 482, 474, EEC B.14) - Chronic toxicity/carcinogenicity (rat, mice): no carcinogenic effect (OECD no. 453, 451) - Multigeneration reproduction study (rat): negative (OECD no. 416) - Teratogenicity (rat, rabbit): negative (OECD draft guideline no. 414)

Based on the available data, the classification criteria are met for the acute toxicity hazard class and the skin sensitization hazard class.

**Information on likely routes of exposure**

This product is for agricultural use; therefore the most probable routes of exposure are via skin or inhalation.

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**12. ECOLOGICAL INFORMATION**

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**12.1. Toxicity**

<b>Name</b>	<b>Clothianidin, 500 g/kg water dispersible granules</b>
<b>Fish</b>	Acute toxicity, 96h-LC50 ( <i>Oncorhynchus mykiss</i> ): 6.78 mg/l (OECD No. 203)
<b>Daphnia</b>	Acute toxicity, 48h-EC50 ( <i>Daphnia magna</i> ): = 28 mg/l (OECD No. 202)
<b>Sediment dwelling midge</b>	Chronic toxicity, 28d-EC15 ( <i>Chironomus riparius</i> ): = 0.00074 mg a.s./l (BBA guideline 1995)
<b>Bees</b>	Acute oral toxicity, 48h-LD50 ( <i>Apis mellifera</i> ): = 0.0018 µg a.s./bee (EPPO No. 170-1992) Acute contact toxicity, 48h-LD50 ( <i>Apis mellifera</i> ): = 0.176 µg a.s./bee (EPPO No. 170-1992)

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<b>Earthworms</b>	Chronic toxicity, 56d-NOEC ( <i>Eisenia foetida</i> ): = 0.53 mg/kg soil (ISO Guideline 11268-2 and BBA guideline)
<b>Soil micro organisms</b>	No significant impact on carbon mineralization or nitrogen transformation at up to 750g as/ha (equivalent to 1.0 mg as/kg dry soil). [OECD 216, 217]

The following data are applicable to ingredient(s) listed below:

<b>Name</b>	<b>Active substance Clothianidin, technical grade</b>
<b>Daphnia</b>	Acute toxicity, 48h-EC50 ( <i>Daphnia magna</i> ): > 40 mg/l (OECD No. 202) Reproduction toxicity, 21-day ( <i>Daphnia magna</i> ): NOEC = 0.12 mg/l (OECD No. 211)
<b>Mysids</b>	Acute toxicity, 96h-LC50 ( <i>Americamysis bahia</i> ): 0.053 mg/l (OPPTS 850.1035) Chronic toxicity (39 d) ( <i>Americamysis bahia</i> ): NOEC = 0.0097 mg/l (OPPTS 850.1350)
<b>Sediment dwelling midge</b>	Acute toxicity, 48h-LC50 ( <i>Chironomus riparius</i> ): = 0.029 mg/l (In house method) Chronic toxicity, 28d-EC15 ( <i>Chironomus riparius</i> ): = 0.00072 mg/l (BBA guideline 1995)
<b>Algae</b>	Acute toxicity, 72h-EC50 ( <i>Pseudokirchneriella subcapitata</i> –ex- <i>Selenastrum capricornutum</i> ): EbC50 = 70 mg/l; ErC50 > 120 mg/l NOECr&b = 15 mg/l (OECD No. 201) Acute toxicity, 72h-EC50 ( <i>Scenedesmus subspicatus</i> ): EbC50 & ErC50 > 270 mg/l (OECD No. 201)
<b>Aquatic plant</b>	Acute toxicity, 14d-EC50 ( <i>Lemna gibba</i> ): >121 mg/l NOEC = 59 mg/l (US EPA OPPTS 850.4400-1996)
<b>Birds</b>	Acute toxicity, single dose acute oral LD50, Japanese quail: = 430 mg/kg bw (US EPA Subdivision E, Guideline 71-1) Bobwhite quail: > 2000 mg/kg bw (US EPA Subdivision E, Guideline 71-1) Mallard duck= 503 mg a.s./kg bw (EPA OPPTS 850.2100)

**12.2. Persistence and degradability**

The following data are applicable to ingredient(s) listed below:

<b>Name</b>	<b>Active substance Clothianidin, technical grade</b>
<b>Degradation Biotic</b>	Not readily biodegradable (EEC, C.4-C)
<b>Degradation Abiotic</b>	Hydrolysis (EEC C.7) DT50 at pH 5, 7, 9: stable (25°C)
<b>Biological methods for sewage treatment</b>	3h-EC50 activated sludge: > 1000 mg/L (OECD 209)

**12.3. Bioaccumulative potential**

The following data are applicable to ingredient(s) listed below:

<b>Name</b>	<b>Active substance Clothianidin, technical grade</b>
<b>Bioaccumulation</b>	Partition coefficient n-octanol/water log Pow = 0.7 (25°C) (OECD 117) Bio Concentration Factor (BCF) in fish: not applicable, no bioaccumulation is expected due to the low value of log Pow.

**12.4. Mobility in soil**

The following data are applicable to ingredient(s) listed below:

<b>Name</b>	<b>Active substance Clothianidin, technical grade</b>
	Adsorption K <sub>oc</sub> values: 84 and 345; Therefore the substance is medium to highly mobile (OECD 106).

**12.5. Results of PBT and vPvB assessment**

not required (no chemical safety report required).

**12.6. Other adverse effects**

no other known adverse effects on the environment.

**13. DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods****Substance and/or Mixture** According to local regulations. For further advice contact manufacturer.

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Contaminated packaging According to local regulations.

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**14. TRANSPORT INFORMATION**

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Land transport ADR/RID, Sea transport IMO/IMDG, Air transport ICAO-TI/IATA-DGR:

14.1. UN Number	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: clothianidin)
14.3. Transport hazard class(es)	Land transport ADR/RID class: 9 label: 9 IMO/IMDG code class: 9 Air transport ICAO-TI/IATA-DGR class: 9
14.4. Packing group	III
14.5. Environmental hazards	Marine pollutant: yes
14.6. Special precautions for user	EMS: F-A, S-F no other special precaution required.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code	not applicable

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**15. REGULATORY INFORMATION**

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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

There is no specific regulation/legislation for this mixture.

**15.2. Chemical safety assessment**

No chemical safety assessment is required for this mixture.

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**16. OTHER INFORMATION**

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**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 and on properties of the active substance.

**Changes made to the previous version:** section nos 2, 3, 4, 9, 11, 12, were modified to remove any reference to directives 2001/59/EC or 1999/45/EC, add changes due to ATP4 and new data.**Full text of hazard statement(s) used in this document:**

- H302: Harmful if swallowed.
- H314: Causes severe skin burns and eye damage.
- H318: Causes serious eye damage.
- H317: May cause an allergic skin reaction.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

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 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.