



SAFETY DATA SHEET

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

TOLCLOFOS-METHYL 50 WP

Ref. RX50WPCLP/EU/530gb

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

1.1. Product identifier Tolclofos-methyl, 500 g/kg wettable powder
GIFAP Code: WP
EC number: not applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against
Fungicide (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
10A, rue de la Voie Lactée
69370 Saint-Didier-au-Mont-d'Or
France
Tel.: +33 (0) 478 64 32 60
email: 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)



Skin sens. Cat 1



Aquatic Chronic Cat 2

Hazard statement(s) H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Signal word(s) Warning

Pictogram (s)



Skin sens. Cat 1



Aquatic Chronic Cat 2

Hazard statement(s) H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary statement(s) P261: Avoid breathing dust/mist/spray.
P280: Wear protective gloves/protective clothing.



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P302+P352: IF ON SKIN: Wash with plenty of water.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 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.

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).

Specific safety precautions none.

2.3. Other hazards Weak anticholinesterase activity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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	57018-04-9	O-2,6-dichloro-4-methylphenyl O,O-dimethyl phosphorothioate
2	1-5	81065-51-2	Naphthalenesulfonic acid, methyl-, polymer with formaldehyde, sodium salt
3	> 1	1332-58-7	hydrated alumina silicate
4	1-5	1322-93-6	Reaction product of naphthalene, propan-2-ol, sulfonated and neutralized by caustic soda

Number	EC number	Annex-1 listing	Regl 1272/2008 Pict.	Hazard statements
1	260-515-3	yes	GHS07, GHS09	H317, H400, H410
2	ND	/	GHS05	H318
3	310-194-1	/	none	none
4	215-343-3	/	GHS05, GHS07	H302, H332, H318, H335

Other information This product contains <0.1% respirable quartz.
 SCAE code: L703E V3.0

4. FIRST AID MEASURES

4.1. Description of first aid measures

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

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

Tolclofos-methyl is an atypical organophosphorous compound which has weak anticholinesterase activity. Symptoms of poisoning may include respiratory difficulty, headache, vomiting, nausea, tremulousness and weakness.
 Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.
 May cause an allergic skin reaction.

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

No specific recommendations.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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Suitable extinguishing media	Dry chemical powder, carbon dioxide.
Unsuitable extinguishing media	none known
5.2. Special hazards arising from the substance or mixture	May emit toxic and irritating fumes under fire conditions
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.

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling	Do NOT USE if under medical advice NOT to work with anticholinesterase compounds. 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

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Name	<i>Tolclofos-methyl, 500 g/kg wettable powder</i>
Appearance	fine powder free from visible extraneous matter and sediment (visual inspection)
Colour	Off white (visual inspection)
Odour	strong chemical (olfactory assessment)
Odour threshold	not determined
pH value	8 at 22°C (1% dilution) (CIPAC MT 75.3)
Melting point/freezing point	not available
Initial boiling point & boiling range	not applicable
Flash point	not applicable
Evaporation rate	not applicable
Flammability	not flammable (EEC A.10 – EEC A.12)
Upper/lower flammability or explosive limits	not determined
Vapour pressure	not determined
Vapour density	not applicable
Relative density	not applicable
Bulk density	taped density: 0.27 g/ml : pour density: 0.22 g/ml (CIPAC MT 186)
Solubility in water	dispersible in water (solubility of tolclofos-methyl = 0.71 mg/l – 20°C, OECD105)
Solubility in other solvents	not applicable
Partition coefficient n-octanol/water	not determined (tolclofos-methyl: log Pow = 4.56, OECD 107)
Autoignition temperature	no self ignition up to 400°C (EEC A.16)
Decomposition temperature	the active ingredient decomposes at 120-220°C, before boiling;
Dynamic viscosity	not applicable
Kinematic viscosity	not applicable
Explosive properties	not explosive (expert statement)
Oxidising properties	not oxidising (expert statement)
9.2. Other information	
Relative vapour density (air = 1)	not determined
Surface tension	not applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity	Stable under recommended storage and handling conditions (see also section 7).
10.2. Chemical stability	Stable for a minimum of 2 years under recommended storage and handling conditions (see section 7).



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10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid high temperature, light, humidity.

10.5. Incompatible materials

Alkaline materials.

10.6. Hazardous decomposition products

May emit toxic and irritating fumes under fire conditions (see also section 5).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Name	<i>Tolclofos-methyl, 500 g/kg wettable powder</i>
Acute toxicity	
Oral	LD50 rat: >5000 mg/kg (OECD 401)
Dermal	LD50 rat: > 5000 mg/kg (EEC B.3)
Inhalation	LC50 rat (4 hours): >1.9 mg/l (maximum feasible concentration ; whole body) (EEC B.2)
Irritation	
Skin	not irritating (EEC B.4)
Eye	not irritating (EEC B.5)
Sensitization	not sensitizing (Buehler test) (OECD 406)

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

Name	Active substance Tolclofos-methyl, technical grade
Other toxicological information:	- genotoxicity: negative in all tests (EEC B.14, B.11, B.10) - Carcinogenicity (rat, mice): negative (EEC part B) - Multigeneration reproduction study (rat): negative (EEC part B) - teratogenicity studies (rat, rabbit): negative (OECD 414)

Based on the available data, no classification criteria are met for any of these hazard classes. Nevertheless, as the active substance is classified as sensitizing, the formulation is considered to reach the criteria for the sensitization 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.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Name	<i>Tolclofos-methyl, 500 g/kg wettable powder</i>
Fish	Acute toxicity, 96h (<i>Oncorhynchus mykiss</i>): LC50 >40 mg/l (>20 mg a.s/l) NOEC = 1.24 mg/l (= 0.62 mg a.s/l) (OECD 203)
	Acute toxicity, 96h (<i>Lepomis macrochirus</i>): LC50 >108 mg/l (>54 mg a.s/l) NOEC = 54 mg/l (= 27 mg a.s/l) (OECD 203)
Daphnia	Acute toxicity, 48h (<i>Daphnia magna</i>): EC50 = 60 mg/l (30 mg a.s/l) NOEC = 16.4 mg/l (= 8.2 mg a.s/l) (OECD 202)
Algae	Acute toxicity, 72h-EC50 (<i>Scenedesmus subspicatus</i>): (OECD 201) EC _b 50: 1.30 mg/l (0.65 mg a.s/l); NOEC _b = 0.62 mg/l (= 0.31 mg a.s/l) EC _r 50: >3.4 mg/l (>1.70 mg a.s/l); NOEC _r >3.4 mg/l (>1.70 mg a.s/l)

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Birds	Acute toxicity, LC50 (Mallard duck): > 7554 mg/kg (> 3777 mg a.s/kg) (US EPA WG Draft April 27, 1977) Acute toxicity, LC50 (Bobwhite quail): > 11364 mg/kg (> 5682 mg a.s/kg) (US EPA WG Draft April 27, 1977)
Bees	Acute contact toxicity, 48h-LD50 (<i>Apis mellifera</i>): 508.5 µg/bee (254.3 µg a.s/bee) Acute oral toxicity, 48h-LD50 (<i>Apis mellifera</i>): 300.9 µg/bee (150.5 µg a.s/bee) (Pesticides Registration in Poland and German, 1976, Method # 12)

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

Name	Active substance Tolclofos-methyl, technical grade
Fish	Acute toxicity, 96h (<i>Oncorhynchus mykiss</i>): LC50 = 0.69 mg/l; NOEC = 0.35 mg/l (OECD 203) Acute toxicity, 96h (<i>Lepomis macrochirus</i>): LC50 > 0.72 mg/l; NOEC = 0.72 mg/l (EPA-660/3-75-009)
Daphnia	Acute toxicity, 48h (<i>Daphnia magna</i>): EC50 = 48 mg/l; NOEC = 17 mg/l (EPA 40 CFR, Part 158.145, Guideline 72-2) Chronic toxicity, 21d-NOEC (<i>Daphnia magna</i>) = 0.026 mg/l (ASTM Draft No. 3, March, 1981)
Sediment dwelling midge	Chronic toxicity, 28d-NOEC (<i>Chironomus riparius</i>): 0.25 mg/l (OECD 219)
Algae	Acute toxicity, 72h (<i>Scenedesmus subspicatus</i>): ECb50 = 0.78 mg/l; ECr50 > 1.1 mg/l; NOEC b & r = 0.22 mg/l (OECD 201)
Earthworms	Acute oral toxicity, 14d-LC50 (<i>Eisenia foetida</i>): > 1000 mg/kg soil (OECD 207)
Soil micro organisms	No significant impact on carbon mineralization or nitrogen transformation at up to 25 mg/kg (Dutch requirements)

12.2. Persistence and degradability

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

Name	Active substance Tolclofos-methyl, technical grade
Degradation Biotic	Not readily biodegradable (OECD 301C - Modified MITI test I)
Degradation Abiotic	Hydrolysis (EEC C.7) pH4: DT50 = 126 days at 20°C pH7: DT50 = 97 days at 20°C pH9: DT50 = 102 days at 20°C
Biological methods for sewage treatment	3h-EC50 activated sludge: > 100 mg/L (OECD 209)

12.3. Bioaccumulative potential

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

Name	Active substance Tolclofos-methyl, technical grade
Bioaccumulation	Partition coefficient n-octanol/water log Pow = 4.56 (OECD 107) Bio Concentration Factor (BCF), exposure 28 days bluegill sunfish (<i>Lepomis macrochirus</i>): 670 (whole fish) (deuration time: CT95 = 4.7 days - whole fish) (Federal Register, Vol. 44, No. 53)

12.4. Mobility in soil

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

Name	Active substance Tolclofos-methyl, technical grade
	Adsorption K_{Foc} values: 1649-6139; Desorption $K_{Foc-des}$ values: 2572-6578 for 4 soils. Therefore the substance has low mobility to immobility (EPA 163-1).

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.

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13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Substance and/or Mixture	According to local regulations. For further advice contact manufacturer.
Contaminated packaging	According to local regulations.

14. TRANSPORT INFORMATION

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: tolclofos-methyl)
14.3. Transport hazard class(es)	Land transport ADR/RID class: 9 IMO/IMDG code class: 9 Air transport ICAO-TI/IATA-DGR class: 9 label: 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

15. REGULATORY INFORMATION

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.

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 and on the properties of the active substance.

Changes made to the previous version: section nos 2, 3, 9, were modified according to the change of composition of the mixture.

Full text of hazard statement(s) used in this document:

H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H332: Harmful if inhaled.
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.



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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.