

ACTELIC GOLD DUST

Version 3 - This version replaces all previous versions.

Revision Date 04.03.2014

Print Date 04.03.2014

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier****Product name** : ACTELIC GOLD DUST**Design code** : A15665B**1.2 Relevant identified uses of the substance or mixture and uses advised against****Use** : Insecticide**1.3 Details of the supplier of the safety data sheet****Company** : Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland**Telephone** : +41 61 323 11 11**Telefax** : +41 61 323 12 12**E-mail address** : sds.ch@syngenta.com**1.4 Emergency telephone number****Emergency telephone number** : +44 1484 538444**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Classification according to Regulation (EU) 1272/2008

Acute aquatic toxicity Category 1 H400

Chronic aquatic toxicity Category 1 H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

N, Dangerous for the environment**R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**

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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	:	Warning	
Hazard statements	:	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P273 P391 P501	Avoid release to the environment. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



**Dangerous
for the envi-
ronment**

R-phrases(s)	:	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	:	S 2 S13 S20/21 S35 S57	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination.
Additional Labelling	:	To avoid risks to man and the environment, comply with the instructions for use.	

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2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
pirimiphos-methyl	29232-93-7 249-528-5	Xn, N R22 R50/53	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	1.6 % W/W
thiamethoxam	153719-23-4	F, Xn, N R11 R22 R50/53	Flam. Sol.1; H228 Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	0.36 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation** : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.
- Skin contact** : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
Wash off immediately with plenty of water.
- Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

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4.2 Most important symptoms and effects, both acute and delayed**Symptoms** : The symptoms are of cholinesterase inhibition**4.3 Indication of any immediate medical attention and special treatment needed****Medical advice** : Call Syngenta at the emergency number shown in this document, a poison control center or doctor immediately for treatment advice.
Consider taking venous blood for determination of blood cholinesterase activity (use heparin tube)
Administer atropine sulfate, either by intramuscular or intravenously, dependant on severity of poisoning
Specific antidotes are oximes (e.g. Pralidoxime) or Toxogonin

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or
Water spray

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixtureAs the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.**5.3 Advice for firefighters**

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**Refer to protective measures listed in sections 7 and 8.
Avoid dust formation.**6.2 Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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6.3 Methods and materials for containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed air.

Clean contaminated surface thoroughly.

If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

Refer to disposal considerations listed in section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

No special protective measures against fire required.

Avoid contact with skin and eyes.

When using do not eat, drink or smoke.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

No special storage conditions required.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
pirimiphos-methyl	3 mg/m ³ (Skin)	8 h TWA	SYNGENTA
thiamethoxam	3 mg/m ³	8 h TWA	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

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8.2 Exposure controls

- Engineering measures** : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne dust is generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.
- Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.
Personal protective equipment should be certified to appropriate standards.
- Respiratory protection** : No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection** : Chemical resistant gloves are not usually required.
Select gloves based on the physical job requirements.
- Eye protection** : Eye protection is not usually required.
Follow any site specific eye protection policies.
- Skin and body protection** : No special protective equipment required.
Select skin and body protection based on the physical job requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: solid
Form	: powder
Colour	: grey beige
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	No data available

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Thermal decomposition : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2 Other information : No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No information available.

10.2 Chemical stability
No information available.

10.3 Possibility of hazardous reactions
None known.
Hazardous polymerisation does not occur.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
Combustion or thermal decomposition will evolve toxic and irritant vapors.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute oral toxicity : LD50 female rat, > 2,000 mg/kg

Acute inhalation toxicity : LC50 male and female rat, 7.10 mg/l , 4 h

Acute dermal toxicity : LD50 male and female rat, > 5,000 mg/kg

Skin corrosion/irritation : rabbit: Non-irritating

Serious eye damage/eye irritation : rabbit: Non-irritating

Respiratory or skin sensitisation : Buehler Test guinea pig: Not a skin sensitizer in animal tests.

Germ cell mutagenicity
pirimiphos-methyl : Did not show mutagenic effects in animal experiments.
thiamethoxam : Did not show mutagenic effects in animal experiments.

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Carcinogenicity

- pirimiphos-methyl : Did not show carcinogenic effects in animal experiments.
 thiamethoxam : Liver tumours noted in mice that are not relevant to humans.

Teratogenicity

- pirimiphos-methyl : Did not show teratogenic effects in animal experiments.

Reproductive toxicity

- pirimiphos-methyl : Did not show reproductive toxicity effects in animal experiments.
 thiamethoxam : Did not show reproductive toxicity effects in animal experiments.

STOT - repeated exposure

- pirimiphos-methyl : No adverse effect has been observed in chronic toxicity tests.
 thiamethoxam : Did not show neurotoxicity in animal experiments.

Further information

- thiamethoxam : No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

- pirimiphos-methyl : LC50 *Oncorhynchus mykiss* (rainbow trout), 0.64 mg/l , 96 h
 NOEC *Oncorhynchus mykiss* (rainbow trout), < 0.023 mg/l , 28 d
 thiamethoxam : LC50 *Oncorhynchus mykiss* (rainbow trout), > 100 mg/l , 96 h

Toxicity to aquatic invertebrates

- pirimiphos-methyl : EC50 *Daphnia magna* (Water flea), 0.21 µg/l , 48 h
 NOEC *Daphnia magna* (Water flea), 0.05 µg/l , 21 d
 thiamethoxam : EC50 *Daphnia magna* (Water flea), > 100 mg/l , 48 h
 EC50 *Cloeon* sp., 0.014 mg/l , 48 h

Toxicity to aquatic plants

- pirimiphos-methyl : EbC50 *Pseudokirchneriella subcapitata* (green algae), 1 mg/l , 96 h
 ErC50 *Pseudokirchneriella subcapitata* (green algae), 4.9 mg/l , 96 h
 thiamethoxam : EbC50 *Pseudokirchneriella subcapitata* (green algae), > 81.8 mg/l , 72 h
 ErC50 *Pseudokirchneriella subcapitata* (green algae), > 81.8 mg/l , 72 h

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12.2 Persistence and degradability**Biodegradability**

thiamethoxam : Not readily biodegradable.

Stability in water

pirimiphos-methyl : Degradation half life: 4 - 6 d
Not persistent in water.
thiamethoxam : Degradation half life: 11 d
Not persistent in water.

Stability in soil

pirimiphos-methyl : Degradation half life: 8.3 d
Not persistent in soil.
thiamethoxam : Degradation half life: 51 d
Not persistent in soil.

12.3 Bioaccumulative potential

pirimiphos-methyl : Pirimiphos-methyl has high potential for bioaccumulation
thiamethoxam : The substance has low potential for bioaccumulation.

12.4 Mobility in soil

pirimiphos-methyl : Pirimiphos-methyl has low mobility in soil.
thiamethoxam : The substance has medium mobility in soil.

12.5 Results of PBT and vPvB assessment

pirimiphos-methyl : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
thiamethoxam : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.

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Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: TRANSPORT INFORMATION**Land transport (ADR/RID)**

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PIRIMIPHOS-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Environmentally hazardous
Tunnel restriction code:	E

Sea transport(IMDG)

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PIRIMIPHOS-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Marine pollutant

Air transport (IATA-DGR)

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PIRIMIPHOS-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9

14.6 Special precautions for user

none

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

GHS-Labeling

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Hazard pictograms



Signal word	:	Warning
Hazard statements	:	H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P273 Avoid release to the environment. P391 Collect spillage. P501 Dispose of contents/ container to an approved waste disposal plant.
Remarks	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.

Hazardous components which must be listed on the label:

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION**Further information**

Full text of R-phrases referred to under sections 2 and 3:

R11	Highly flammable.
R22	Harmful if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H228	Flammable solid.
H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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Full text of other abbreviations

ADR:	European Agreement Concerning the International Carriage of Dangerous Goods by Road	RID:	Regulations concerning the International Carriage of Dangerous Goods by Rail
IMDG:	International Maritime Code for Dangerous Goods	IATA-DGR:	International Air Transport Association Dangerous Goods Regulations
LC50:	Lethal concentration, 50%	LD50:	Lethal dose, 50%
EC50:	Effective dose, 50%	GHS:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

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