

INSECTICIDE

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

Tradename **ACTELIC SMOKE GENERATOR No. 20**
Design Code **A13668A**
AGI Code **1001798**
Sales Code **21133**

COMPANY/UNDERTAKING IDENTIFICATION

Company Syngenta Crop Protection UK Ltd
CPC4, Capital Park, Fulbourn, Cambridge CB21 5XE
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Website www.syngenta-crop.co.uk
Emergency Phone **0044 (0)1484 538444 (24h)**

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

CAS-NO.	EC-NO.	CHEMICAL NAME	CONCENTRATION (W/W)	HAZARD SYMBOLS	RISK PHRASES (R)
29232-93-7	249-528-5	pirimiphos-methyl	22.5%	Xn,N	22, 50/53
3811-04-9	223-289-7	chloric acid, potassium salt	10–20%	O,Xn,N	9, 20/22, 51/53

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

3. HAZARDS IDENTIFICATION

Harmful by inhalation. This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Highly flammable. May form flammable dust-air mixture.

4. 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 Centre or physician, or going for treatment.

Inhalation: Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician or Poison Control Centre immediately.

Skin contact: Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

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 and label. Do not induce vomiting.

Symptoms: The symptoms are of cholinesterase inhibition.

MEDICAL ADVICE

Call Syngenta at the emergency number shown in this document, a Poison Control Centre or doctor immediately for treatment advice. Consider taking venous blood for determination of blood cholinesterase activity (use heparin tube). Administer atropine sulphate, either by intramuscular or intravenously, dependant on severity of poisoning. Specific antidotes are oximes (e.g., Pralidoxime) or Toxogonin.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

Extinguishing media – small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media – large fires: Use alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards during fire fighting: Fire will spread by burning flame. As 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. May cause or intensify fire; oxidizer.

Special protective equipment for fire fighters: Wear full protective clothing and self-contained breathing apparatus.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for 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 regulations (see section 13). Do not create a powder cloud by using a brush or compressed air.

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

7. HANDLING AND STORAGE

HANDLING

Advice on safe handling: This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics of this will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

INSECTICIDE

STORAGE

Requirements for storage areas and containers: 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 feed. Keep away from heat and sources of ignition. Keep away from combustible material. Keep in an area equipped with sprinklers. No smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Components	Exposure limit(s)	Value type	Source
pirimiphos-methyl	3 mg/m ³	8 h TWA	SYNGENTA

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 mists or vapours are 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.

PERSONAL PROTECTIVE EQUIPMENT

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

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: A combination gas, vapour and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.

Eye protection: If eye contact is possible, use tight-fitting chemical safety goggles.

Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	Off-white.
Physical State:	Granules.
Odour:	Characteristic.
Minimum Ignition Temp.:	475°C
Minimum Ignition:	>0.5J
Oxidising Properties:	Oxidising.
Explosive Properties:	Not explosive.
Solubility:	Slightly soluble in water.

10. STABILITY AND REACTIVITY

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapours.

Hazardous reactions: None known. Hazardous polymerization does not occur. Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: Median lethal dose rat, >2000 mg/kg.

Acute Inhalation Toxicity: Median lethal concentration female rat, 3.22 mg/l, 4 h.
Median lethal concentration male rat, 3.4 mg/l, 4 h.

Acute Dermal Toxicity: Median lethal dose rat, >2000 mg/kg.

Skin Irritation: Non-Irritating.

Eye Irritation: Non-Irritating.

LONG-TERM TOXICITY: Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Bioaccumulation: Pirimiphos-methyl has high potential for bioaccumulation.

Stability in water: Pirimiphos-methyl is not persistent in water.

Stability in water: Pirimiphos-methyl is not persistent in soil.

Mobility: Pirimiphos-methyl has low mobility in soil.

ECOTOXICITY EFFECTS

This ecological assessment is calculated from data available on the components of the formulation.

Toxicity to Fish: LC₅₀ *Oncorhynchus mykiss* (rainbow trout) 3 mg/l 96 h. Derived from components.

Toxicity to Aquatic Invertebrates: EC₅₀ *Daphnia magna* (water flea) 1 µg/l, 48 h. Derived from components.

Toxicity to Algae: EbC₅₀ *Pseudokirchneriella subcapitata* (green algae) 4 mg/l, 96h.
ErC₅₀ *Pseudokirchneriella subcapitata* (green algae) 22 mg/l, 96 h. Derived from components.

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used containers. 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. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

I N S E C T I C I D E

14. TRANSPORT INFORMATION

LAND TRANSPORT (ADR/RID)	Class	UN number	Packaging group
	9	3077	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (PIRIMIPHOS-METHYL)		
SEA (IMDG-CODE)	Class	UN number	Packaging group
	9	3077	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (PIRIMIPHOS-METHYL)		
Marine pollutant:	Yes		
AIR (IATA-DGR)	Class	UN number	Packaging group
	9	3077	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (PIRIMIPHOS-METHYL)		

15. REGULATORY INFORMATION

Classifications/	Xn	HARMFUL
Hazard symbols	N	DANGEROUS FOR THE ENVIRONMENT
	F	HIGHLY FLAMMABLE
Risk phrases (R)	11	Highly Flammable.
	20	Harmful by inhalation.
	51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases (S)	2	Keep out of the reach of children.
	13	Keep away from food, drink and animal feeding stuffs.
	17	Keep away from combustible material.
	20/21	When using do not eat, drink or smoke.
	23	Do not breathe fumes.
	28	After contact with skin, wash immediately with plenty of water.
	35	This material and its container must be disposed of in a safe way.
	57	Use appropriate containment to avoid environmental contamination.
Special label	To avoid risks to man and the environment, comply with the instructions for use.	

16. OTHER INFORMATION

Always read the label. Use pesticides safely.

Product approval number: MAPP 10540

Based upon SDS release date 01/12/06.

Text of R phrases mentioned in Section 2:

R9 Explosive when mixed with combustible material.

R20/22 Harmful by inhalation and if swallowed.

R22 Harmful if swallowed.

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

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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