

**ACTELIC 50EC****Version 12 - This version replaces all previous versions.**

Revision Date 12.11.2015

**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****Product name** : ACTELIC 50EC**Design code** : A5832C**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 UK Limited  
CPC4, Capital Park  
Fulbourn,  
Cambridge  
CB21 5XE**Telephone** : (01223) 883400**Telefax** : (01223) 882195**Website** : [www.syngenta.co.uk](http://www.syngenta.co.uk)**1.4 Emergency telephone number**

: +44 (0) 1484 538444

**SECTION 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Classification according to Regulation (EU) 1272/2008

Flammable liquids	Category 3	H226
Acute toxicity (Oral)	Category 4	H302
Aspiration hazard	Category 1	H304
Skin Sensitisation	Category 1B	H317
Serious eye damage	Category 1	H318
STOT – single exposure	Category 3	H335
STOT – single exposure	Category 3	H336
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.

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### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

#### Hazard pictograms



Signal Word	:Danger	
Hazard Statements	:H226	Flammable liquid and vapour.
	:H302	Harmful if swallowed.
	:H304	May be fatal if swallowed and enters airways.
	:H317	May cause an allergic skin reaction.
	:H318	Causes serious eye damage.
	:H335	May cause respiratory irritation.
Precautions Statements	:H336	May cause drowsiness or dizziness.
	:H410	Very toxic to aquatic life with long lasting effects.
	:P102	Keep out of reach of children.
	:P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	:P280	Wear protective gloves/protective clothing/eye protection/face protection.
	:P301/P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
	:P305/P351/P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	:P331	Do NOT induce vomiting
	:P391	Collect spillage.
Supplemental Information	:P501	<b>Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.</b>
	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.
	:EUH066	Repeated exposure may cause skin dryness or cracking.

Hazardous components which must be listed on the label:

- pirimiphos-methyl
- solvent naphtha (petroleum), light arom.

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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 (REGULATION (EC) No 1272/2008)	Concentration
pirimiphos-methyl	29232-93-7 249-528-5	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	49 % W/W
solvent naphtha (petroleum), light arom.	64742-95-6 265-199-0 01-2119455851-35-0 002	Flam. Liq.3; H226 STOT SE3; H335 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	40 - 50 % W/W
calcium dodecyl benzene sulphonate	26264-06-2 90194-26-6 247-557-8	Skin Irrit.2; H315 Eye Dam.1; H318	1 - 5 % W/W
2-methylpropan-1-ol	78-83-1 201-148-0 01-2119484609-23-0 012	Flam. Liq.3; H226 STOT SE3; H335 Skin Irrit.2; H315 Eye Dam.1; H318 STOT SE3; H336	1 - 2 % W/W

Substances for which there are Community workplace exposure limits.

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 centre 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 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 or label. Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed Symptoms :

The symptoms are of cholinesterase inhibition

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**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  
Use 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 mixture**  
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.
- 5.3 Advice for fire-fighters:**  
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. Keep people away from and upwind of spill/leak. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition. Pay attention to flashback.
- 6.2 Environmental precautions:**  
Prevent further leakage or spillage if safe to do so.  
Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- 6.4 Reference to other sections**  
Refer to protective measures listed in sections 7 and 8.  
Refer to disposal considerations listed in section 13.

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**SECTION 7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Avoid contact with skin and eyes. When using do not eat, drink or smoke. Use only in an area containing flame proof equipment. Take precautionary measures against static discharges. For personal protection see section 8.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from combustible material. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feedingstuffs. No smoking.
- 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 <sup>3</sup> (Skin)	8 h TWA	SYNGENTA
solvent naphtha (petroleum), light arom.	100 mg/m <sup>3</sup>	8 h TWA	SUPPLIER

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

**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** A gas and vapor filter 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 should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The

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<b>Eye protection</b>	breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material: nitrile rubber. If eye contact is possible, use tight-fitting chemical safety goggles and a faceshield.
<b>Skin and body protection</b>	Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.). Wear as appropriate: impervious protective suit.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical

##### properties

<b>Physical State</b>	: liquid
<b>Form</b>	: liquid.clear
<b>Colour</b>	: light yellow to brown.
<b>Odour</b>	: aromatic
<b>Odour Threshold</b>	: No data available
<b>pH</b>	: 4 - 8 at 1 % w/v
<b>Melting point/range</b>	: No data available
<b>Boiling point/boiling range</b>	: No data available
<b>Flash point</b>	: 46 °C
<b>Evaporation rate</b>	: No data available
<b>Flammability (solid, gas)</b>	: No data available
<b>Lower explosion limit</b>	: No data available
<b>Upper explosion limit</b>	: No data available
<b>Vapour pressure</b>	: No data available
<b>Relative vapour density</b>	: No data available
<b>Density</b>	: 1.02 g/ml at 20 °C
<b>Solubility in other solvents</b>	: Miscible in water
<b>Partition Coefficient n-octanol/water</b>	: No data available
<b>Autoignition temperature</b>	: 410 °C
<b>Thermal decomposition</b>	: No data available
<b>Viscosity, dynamic</b>	: 4.61 mPa.s at 40 °C 8.08 mPa.s at 20 °C
<b>Viscosity, kinematic</b>	: No data available
<b>Explosive properties</b>	: Not explosive
<b>Oxidizing properties</b>	: Not oxidising

#### 9.2 Other information

<b>Surface tension</b>	35.3 mN/m at 25 °C
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### SECTION 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	: No information available
<b>10.2 Chemical Stability</b>	: No information available
<b>10.3 Possibility of hazardous reactions</b>	: None known. Hazardous polymerisation does not occur.
<b>10.4 Conditions to avoid</b>	: No information available

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<b>10.5 Incompatible materials</b>	: No information available
<b>10.6 Hazardous decomposition products</b>	: Combustion or thermal decomposition will evolve toxic and irritant vapours.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Acute oral toxicity	: LD50 female rat, 300 - 2,000 mg/kg
Acute inhalational toxicity	
pirimiphos-methyl	: LC50 male and female rat, > 5.04 mg/l, 4 h
solvent naphtha	Irritating to respiratory system.
(petroleum), light arom.	
Acute dermal toxicity	: LD50 male and female rat, > 2,000 mg/kg
Skin corrosion/irritation	: rabbit: Mildly irritating
Serious eye damage/eye irritation	: rabbit: Moderately irritating
Respiratory or skin sensitisation	: Buehler Test guinea pig: A skin sensitizer in animal tests..
Germ cell mutagenicity	
pirimiphos-methyl	: Did not show mutagenic effects in animal experiments.
2-methylpropan-1-ol	: Did not show mutagenic effects in animal experiments.
Carcinogenicity	
pirimiphos-methyl	: Did not show carcinogenic effects in animal experiments.
2-methylpropan-1-ol	: Did not show carcinogenic effects in animal experiments.
Teratogenicity	
pirimiphos-methyl	: Did not show teratogenic effects in animal experiments.
Reproductive toxicity	
pirimiphos-methyl	: Did not show reproductive toxicity effects in animal experiments.
2-methylpropan-1-ol	: Did not show reproductive toxicity effects in animal experiments.
STOT – single exposure	
2-methylpropan-1-ol	: May cause drowsiness or dizziness.
STOT – repeated exposure	
pirimiphos-methyl	: No adverse effect has been observed in chronic toxicity tests.
2-methylpropan-1-ol	: No adverse effect has been observed in chronic toxicity tests.
Aspiration Toxicity	
Solvent naphtha	: Aspiration hazard if swallowed - can enter lungs and cause damage.
(petroleum), light arom.	

### SECTION 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Toxicity to fish	: LC50 Cyprinus carpio (Carp), 6.2 mg/l, 96 h
Toxicity to aquatic invertebrates	: EC50 Daphnia magna (Water flea), 0.48 µg/l, 48 h
Toxicity to aquatic plants	: EbC50 Pseudokirchneriella subcapitata (green algae), 3.07 mg/l, 72 h ErC50 Pseudokirchneriella subcapitata (green algae), 8.27 mg/l, 72 h

#### 12.2 Persistence and degradability

Stability in water	
pirimiphos-methyl	: Degradation half life: 4 - 6 d Persistent in water
Stability in soil	
pirimiphos-methyl	: Degradation half life: 8.3 d Not persistent in soil

#### 12.3 Bioaccumulative potential

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pirimiphos-methyl : High potential for bioaccumulation

### 12.4 Mobility in soil

pirimiphos-methyl : Low 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).

### 12.6 Other adverse effects

**Other information** : Classification of the product is based on the summation of the concentrations of classified components.

## 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. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

## SECTION 14. TRANSPORT INFORMATION

### Land transport (ADR/RID)

14.1	UN Number	:	UN 1193
14.2	UN proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (SUBSTITUTED BENZENOIDHYDROCARBONS AND PIRIMIPHOS-METHYL)
14.3	Transport hazard class(es)	:	3
14.4	Packing Group	:	III
	Labels	:	3
14.5	Environmental hazards	:	Environmentally hazardous

### Sea transport (IMDG)

14.1	UN Number	:	UN 1993
14.2	UN proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (SUBSTITUTED BENZENOID HYDROCARBONS AND PIRIMIPHOS-METHYL)
14.3	Transport hazard class(es)	:	3
14.4	Packing Group	:	III
	Labels	:	3
14.5	Environmental hazards	:	Marine Pollutant

### Air transport (IATA-DGR)

14.1	UN Number	:	UN 1993
14.2	UN proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (SUBSTITUTED BENZENOID HYDROCARBONS AND PIRIMIPHOS-METHYL)
14.3	Transport hazard class(es)	:	3



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14.4	Packing Group	:	III
	Labels	:	3
14.6	Special precautions for user	:	none

### 14.6 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

#### Hazard pictograms



Signal Word : Danger

Hazard Statements	:H226 :H302 :H304 :H317 :H318 :H335 :H336 :H410	Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Very toxic to aquatic life with long lasting effects.
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Precautions Statements	:P102 :P210  :P280  :P301/P310 :P305/P351/P338  :P331 :P391 :P501	Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting Collect spillage. <b>Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.</b>
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Supplemental Information	:EUH401 :EUH066	To avoid risks to human health and the environment comply with the instructions for use. Repeated exposure may cause skin dryness or cracking.
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Hazardous components which must be listed on the label:

- pirimiphos-methyl
- solvent naphtha (petroleum), light arom.

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**15.2 Chemical Safety Assessment**A Chemical Safety Assessment is not required for this substance.

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**SECTION 16. OTHER INFORMATION**

Approval number, MAPP 12726.

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 12/11/2013, version 11 with local amendment.

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

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
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

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 a 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.

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