

**DECIS EC25 12X1L BOT GB**Version 2 / GB  
1020000057321/9  
Revision Date: 24.02.2006  
Print Date: 26.04.2006**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name DECIS EC25 12X1L BOT GB  
Product code (UVP) 06210805  
Usage insecticide  
Company Bayer CropScience Limited  
230 Cambridge Science Park  
Milton Road  
Cambridge  
Cambridgeshire CB4 0WB  
Great Britain  
Telephone +44(0)1223 226500  
Telefax +44(0)1223 426240  
Emergency telephone number 0800-220876 (UK 24 hr)  
+44(0)1603-242424 (Overseas 24 hr)

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical nature**

Emulsifiable concentrate (EC)  
Deltamethrin 25 g/l

**Hazardous components**

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases(s)	Concentration [%]
Deltamethrin	52918-63-5 258-256-6	T, N	R23/25, R50/53	2.80
Tetrapropylene benzene sulfonate, calcium salt	11117-11-6 234-360-7	C	R21, R34, R52/53	> 1.00 - < 5.00
2-Methylpropan-1-ol	78-83-1 201-148-0	Xi	R10, R37/38, R41, R67	> 1.00 - < 5.00
Solvent Naphtha (petroleum), light aromatic	64742-95-6	Xn, N	R10, R37, R51/53, R65, R66, R67	> 50.00

**3. HAZARDS IDENTIFICATION****Risk advice to man and the environment**

Flammable.  
Harmful by inhalation and if swallowed.  
Irritating to respiratory system and skin.  
Risk of serious damage to eyes.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Harmful: may cause lung damage if swallowed.

**4. FIRST AID MEASURES**

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Remove contaminated clothing immediately and dispose of safely.

**Inhalation**

If symptoms persist, call a physician. Move to fresh air. Keep patient warm and at rest.

**Skin contact**

Take off contaminated clothing and shoes immediately. Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. Wash off immediately with soap and plenty of water. After skin contact: Apply Vitamin E cream or a simple body milk. After skin contact: Apply Vitamin E cream or a simple body milk. If symptoms persist, call a physician.

**Eye contact**

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Ingestion**

Obtain medical attention. Do not induce vomiting. Keep at rest. Rinse mouth.

**Notes to Physician****Symptoms**

Local: After skin contact: paresthesia (local). May cause irritation to skin and mucous membranes. Inhalation may provoke the following symptoms: irritation, cough

**Symptoms**

Systemic: excitement, gastrointestinal discomfort, tremors, Dizziness, headache, listlessness, nausea and vomiting, epigastric pain, muscular fasciculation of limbs, unconsciousness, convulsions and coma (very high doses).

**Risks**

This product contains a pyrethroid.  
Must NOT be confused with organophosphorus compounds!  
Risk of product entering the lungs on vomiting after ingestion.

**Treatment**

Local treatment:  
Initial treatment should be symptomatic and supportive.  
After eye contact: Instillation of local anaesthetic drops e.g. 1% Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.

**Treatment**

Systemic treatment:  
Endotracheal intubation should be done and gastric lavage performed, followed by administration of charcoal.  
Monitoring of respiratory and cardiac functions.  
ECG - monitoring (Electrocardiogram).  
Check for pulmonary oedema in event of inhalation.  
Keep airway clear, administer artificial respiration if necessary.  
Against convulsions: give diazepam. For adults 5-10 mg intravenously as necessary until fully sedated; for children 2.5 mg i.v.  
There is no specific antidote.  
Contraindication: atropine.  
Contraindication: derivatives of adrenaline.  
Recovery: spontaneous.

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**5. FIRE-FIGHTING MEASURES**



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### **Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Extinguishing media which must not be used for safety reasons**

high volume water jet

### **Specific hazards during fire fighting**

In case of fire the evolution of dangerous gases is possible.

### **Special protective equipment for fire-fighters**

In the event of fire and/or explosion do not breathe fumes.

Wear self contained breathing apparatus for fire fighting if necessary.

### **Further information**

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.

Whenever possible, contain fire-fighting water by diking area with sand or earth.

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## 6. ACCIDENTAL RELEASE MEASURES

### **Personal Precautions**

Keep people away from and upwind of spill/leak.

Avoid contact with spilled product or contaminated surfaces.

When dealing with a spillage do not eat, drink or smoke.

### **Environmental Precautions**

Do not discharge into the drains/surface water/groundwater.

If spillage enters drains leading to sewage works inform local water company immediately.

If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

### **Methods for Cleaning Up**

Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material).

Keep in suitable, closed containers for disposal.

Clean floors and contaminated objects with plenty of water.

### **Additional Advice**

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

Check also for any local site procedures.

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## 7. HANDLING AND STORAGE

### **Handling**

#### **Advice on safe handling**

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.

Use only in area provided with appropriate exhaust ventilation.

#### **Advice on protection against fire and explosion**

The product is flammable.

Keep away from sources of ignition - No smoking.

Vapours may form explosive mixture with air.

### **Storage**

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## Requirements for storage areas and containers

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

Store in a place accessible by authorized persons only.

Keep away from direct sunlight.

Protect against frost.

## Advice on common storage

Keep away from food, drink and animal feedingstuffs.

## Storage stability

Storage temperature 0 - 30 °C

## Suitable materials

Black mild steel sheet with interior coating

Fluorinated HDPE (high density polyethylene) container

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.**

**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
2-Methylpropan-1-ol	78-83-1	154 mg/m <sup>3</sup> / 50 ppm (TWA)	2005	EH40 WEL
2-Methylpropan-1-ol	78-83-1	231 mg/m <sup>3</sup> / 75 ppm (STEL)	2005	EH40 WEL

## Additional Advice

Observe: Exposure Limits In Air, Group 3: 100 mg/m<sup>3</sup>/ 20 ppm. (aromatic-rich hydrocarbon mixes with > 25% aromatics TRGS 901, No. 72)

**Personal protective equipment**

## Respiratory Protection

Wear respirator conforming to EN140 type A filter.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

## Hand Protection

Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

## Eye protection

Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

## Skin and body protection

Wear standard coverall and Type 6 suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully

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remove and dispose of as advised by manufacturer.

**Hygiene measures**

When using, do not eat, drink or smoke.

Remove soiled clothing immediately.

Remove soaked protective clothing immediately.

Clean hands and face at work intervals and after work.

Work in an adequately ventilated room.

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	liquid, clear
Colour	yellow
Odour	aromatic

**Safety data**

pH	4.0 - 6.0 at 5 %
Flash Point	48 °C
Ignition temperature	> 450 °C The data refers to solvent naphtha petroleum.
Upper explosion limit	7.00 %(V) The data refers to solvent naphtha petroleum.
Lower explosion limit	0.8 %(V) The data refers to solvent naphtha petroleum.
Relative vapour density	1.00 The data refers to solvent naphtha petroleum.
Density	ca. 0.89 g/cm <sup>3</sup> at 20 °C
Water Solubility	miscible
Viscosity, kinematic	1.09 mm <sup>2</sup> /s at 40 °C
Surface tension	27.3 mN/m at 40 °C
Other Information	The product is flammable.

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**10. STABILITY AND REACTIVITY**

Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to avoid	None.

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Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.
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**11. TOXICOLOGICAL INFORMATION**

Acute Oral Toxicity	LD50 (rat) 431 mg/kg
Acute Inhalation Toxicity	LC50 (rat) 2.69 mg/l Exposure time: 4 h Irritating to respiratory system.
Acute Dermal Toxicity	LD50 (rat) > 2,000 mg/kg
Skin Irritation	Irritating to skin. (rabbit)
Eye Irritation	Risk of serious damage to eyes. (rabbit)
Sensitization	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

## Further information

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae.  
However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).  
When inhaled in high concentration, the solvent vapours cause a narcotic effect.

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**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

Bioaccumulation	Bluegill sunfish Bioconcentration factor (BCF): 1,400 The value mentioned relates to the active ingredient deltamethrin.
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**Ecotoxicity effects**

Toxicity to Fish	LC50 (Rainbow trout ( <i>Oncorhynchus mykiss</i> )) 0.00091 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to daphnia	EC50 (Water flea ( <i>Daphnia magna</i> )) 0.00056 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient deltamethrin.
Toxicity to algae	EC50 ( <i>Selenastrum capricornutum</i> ) 1.7 mg/l Exposure time: 96 h

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**13. DISPOSAL CONSIDERATIONS**

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In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.

Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

**Contaminated packaging**

Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.

Add washings to sprayer at time of filling.

Dispose of empty and cleaned packaging safely.

Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose.

Return large containers to supplier.

Follow advice on product label and/or leaflet.

**Waste key for the unused product**

020108 agrochemical waste containing dangerous substances

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**14. TRANSPORT INFORMATION****ADR/RID/ADNR**

UN-No	<b>3351</b>
Labels	6.1 (3)
Packaging group	III
Hazard no.	63
Description of the goods	UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE (DELTAMETHRIN, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)

**IMDG**

UN-No	<b>3351</b>
Class	6.1
Packaging group	III
EmS	F-E , S-D
Marine pollutant	Marine pollutant
Description of the goods	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE (DELTAMETHRIN, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION )

**IATA**

UN-No	<b>3351</b>
Class	6.1
Packaging group	III
Description of the goods	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE (DELTAMETHRIN, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION )

**UK 'Carriage' Regulations**

UN-No	<b>3351</b>
Labels	6.1 (3)
Packaging group	III
Hazard no.	63
Emergency action code	2W

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Description of the goods	UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE (DELTAMETHRIN, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)
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**15. REGULATORY INFORMATION**

This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments.

Classification:

Labelling according to EEC Directive

Hazardous components which must be listed on the label:

- Deltamethrin
- Solvent Naphtha (petroleum), light aromatic

Symbol(s)

Xn	Harmful
N	Dangerous for the environment

R-phrases(s)

R10	Flammable.
R20/22	Harmful by inhalation and if swallowed.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.

S-phrases(s)

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35	This material and its container must be disposed of in a safe way.
S39	Wear eye/face protection.
S57	Use appropriate container to avoid environmental contamination.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**|| CLASSIFICATION ACCORDING TO SPECIFIC UK REGULATIONS:**

The labelling information below is that which has been approved under 'The Control of Pesticides Regulations 1986' and/or 'Part III of the Food and Environment Protection Act 1985' and/or 'Plant Protection Product Regulations 1999' and any subsequent amendments and may differ from that indicated by any toxicological and/or other testing otherwise indicated in this 'Safety Data Sheet'.

Symbol(s)

Xn	Harmful
N	Dangerous for the environment

R-phrases(s)

R10	Flammable.
R20/22	Harmful by inhalation and if swallowed.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.



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## S-phrase(s)

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35	This material and its container must be disposed of in a safe way.
S39	Wear eye/face protection.
S57	Use appropriate container to avoid environmental contamination.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

## Exceptional labelling

To avoid risks to man and the environment, comply with the instructions for use.

## Further information

WHO-classification: II (Moderately hazardous)

**16. OTHER INFORMATION****Further information**

Text of R phrases mentioned in Section 2:

R10	Flammable.
R21	Harmful in contact with skin.
R23/25	Toxic by inhalation and if swallowed.
R34	Causes burns.
R37	Irritating to respiratory system.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
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.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.