



## FICAM D

Version 6 / GB  
10200001385

1/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name FICAM D  
Product code (UVP) 05936500

#### 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

Supplier Bayer Environmental Science  
230 Cambridge Science Park  
Milton Road  
Cambridge  
Cambridgeshire CB4 0WB  
Great Britain

Telephone 00800-1214 9451  
Telefax +44(0)1223 426240  
Responsible Department Email: ukinfo@bayercropscience.com

#### 1.4 Emergency telephone no.

Emergency telephone no. 0800-220876 (UK 24 hr)  
+44(0)1635-563000 (Overseas 24 hr)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

N Dangerous for the environment, R51/53

#### 2.2 Label elements

##### Labelling 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'. Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Bendiocarb

Symbol(s)  
N Dangerous for the environment

R-phrases(s)  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

**FICAM D**Version 6 / GB  
102000001385

2/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013**2.3 Other hazards**

No other hazards known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**Dustable powder (DP)  
Bendiocarb 1,2 % w/w**Hazardous components**R-phrases according to EC directive 67/548/EEC  
Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Concentration [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Bendiocarb	22781-23-3 245-216-8	T; R23/25 Xn; R21 N; R50, R53	Acute Tox. 3, H331 Acute Tox. 3, H301 Acute Tox. 3, H311 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	1.25
Talc	14807-96-6 238-877-9	Not classified	Not classified	> 1.00

**Further information**

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

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures****General advice**

Remove contaminated clothing immediately and dispose of safely.

**Inhalation**

Move the victim to fresh air and keep at rest. Call a physician or poison control center immediately.

**Skin contact**

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.

**Eye contact**

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

**Ingestion**



## FICAM D

Version 6 / GB  
10200001385

3/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.)

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

Local: The product causes irritation of eyes, skin and mucous membranes.

Systemic: Bradycardia, Sweating, Convulsions, Nausea, Lachrymation, Salivation, Vomiting, Diarrhoea, Miosis, Hypotension, Bronchial hypersecretion, Myoclonus, Respiratory paralysis, Somnolence, Coma, Respiratory failure, Hypothermia, Fibrillation, Spasm

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

#### Risks

This product is a cholinesterase inhibitor carbamate.

#### Treatment

Local treatment:

Initial treatment: symptomatic.

#### Treatment

Systemic treatment:

In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens.

Contraindications: derivatives of morphine.

Recovery is spontaneous and without sequelae.

Oxygen or artificial respiration if needed.

Keep respiratory tract clear.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

The following antidotes are generally accepted: atropin and oximes.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable extinguishing media

High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

In common with all other methyl isocyanates, bendiocarb will liberate strongly lachrymatory and very toxic methyl isocyanate when heated above its decomposition temperature which for bendiocarb is > 125 deg C. Methyl isocyanate has a very low flash point and will be readily consumed in a fire. Since methyl isocyanate readily decomposes in contact with water, all decompositions are best extinguished with water.

### 5.3 Advice for firefighters

#### Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

#### Further information



## FICAM D

Version 6 / GB  
102000001385

4/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

---

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.

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak.  
Avoid dust formation.  
Avoid contact with spilled product or contaminated surfaces.  
When dealing with a spillage do not eat, drink or smoke.

### 6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water.  
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).

### 6.3 Methods and materials for containment and cleaning up

#### Methods for cleaning up

Use approved industrial vacuum cleaner for removal.  
Keep in suitable, closed containers for disposal.  
Clean floors and contaminated objects with plenty of water.

#### Additional advice

Check also for any local site procedures.

### 6.4 Reference to other sections

Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

---

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Advice on safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.  
Avoid dust formation.  
Ensure adequate ventilation.

#### Advice on protection against fire and explosion

Dust may form explosive mixture in air.

#### Hygiene measures

When using, do not eat, drink or smoke.  
Remove soiled clothing immediately and clean thoroughly before using again.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
Wash hands immediately after work, if necessary take a shower.

### 7.2 Conditions for safe storage, including any incompatibilities



FICAM D

Version 6 / GB  
10200001385

5/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

**Requirements for storage areas and containers**

Store in a place accessible by authorized persons only.  
Keep away from direct sunlight.  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**Advice on common storage**

Keep away from food, drink and animal feedingstuffs.

**Storage stability**

Other data    Becomes brownish during storage.

**7.3 Specific end uses**

Refer to the label and/or leaflet.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Bendiocarb	22781-23-3	0.2 mg/m <sup>3</sup> (TWA)		OES BCS*
Talc (Respirable dust.)	14807-96-6	1 mg/m <sup>3</sup> (TWA)	12 2011	EH40 WEL

\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

**8.2 Exposure controls**

**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.**

**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

- Respiratory protection**    Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. 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 5 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and



## FICAM D

Version 6 / GB  
102000001385

6/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

should be professionally laundered frequently.

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form	powder
Colour	grey white
Odour	odourless
Flash point	not applicable
Bulk density	500 - 700 kg/m <sup>3</sup>
Water solubility	immiscible

### 9.2 Other information

Further safety related physical-chemical data are not known.

---

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under normal conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to prescribed instructions.

### 10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Store only in the original container.

### 10.6 Hazardous decomposition products

No decomposition products expected under normal conditions of use.

---

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute oral toxicity	LD50 (rat) 12,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 21.5 mg/l Exposure time: 6 h



## FICAM D

Version 6 / GB  
102000001385

7/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

---

Acute dermal toxicity	LD50 (rat) > 5,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test Test conducted with a similar formulation.
Assessment repeated dose toxicity	Bendiocarb caused reversible cholinesterase inhibition without long term effects in animal studies.
Assessment Mutagenicity	Bendiocarb was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Assessment Carcinogenicity	Bendiocarb was not carcinogenic in lifetime feeding studies in rats and mice.
Assessment Toxicity to Reproduction	Bendiocarb did not cause reproductive toxicity in a two-generation study in rats.
Assessment developmental toxicity	Bendiocarb did not cause developmental toxicity in rats and rabbits.

---

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish	LC50 (Cyprinodon variegatus (sheepshead minnow)) 0.86 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient bendiocarb.
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) 0.0377 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient bendiocarb.
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata) 0.408 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient bendiocarb.

### 12.2 Persistence and degradability

Biodegradability Not applicable for this mixture.

### 12.3 Bioaccumulative potential

Bioaccumulation Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): 6  
The value mentioned relates to the active ingredient bendiocarb.

### 12.4 Mobility in soil



## FICAM D

Version 6 / GB  
102000001385

8/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

Mobility in soil Not applicable for this mixture.

### 12.5 Results of PBT and vPvB assessment

Not relevant as no chemical safety report is necessary.

### 12.6 Other adverse effects

Additional ecological information

No other effects to be mentioned.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

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

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

#### Contaminated packaging

Empty remaining contents.

Do not use containers for other products.

Clean container with water.

Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations.

Not completely emptied packagings should be disposed of as hazardous waste.

#### Waste key for the unused product

020108 agrochemical waste containing dangerous substances

## SECTION 14: TRANSPORT INFORMATION

### ADR/RID/ADN

14.1 UN number	<b>3077</b>
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENDIOCARB MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Tunnel Code	E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

### IMDG

14.1 UN number	<b>3077</b>
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.





## FICAM D

Version 6 / GB  
10200001385

9/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

(BENDIOCARB MIXTURE)  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
14.5 Marine pollutant YES

### IATA

14.1 UN number **3077**  
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(BENDIOCARB MIXTURE )  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
14.5 Environm. Hazardous Mark YES

### UK 'Carriage' Regulations

14.1 UN number **3077**  
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(BENDIOCARB MIXTURE)  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
14.5 Environm. Hazardous Mark YES  
Emergency action code 2Z

### 14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

---

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Further information

WHO-classification: U (Unlikely to present acute hazard in normal use)

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

---

## SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R21 Harmful in contact with skin.  
R23/25 Toxic by inhalation and if swallowed.  
R50 Very toxic to aquatic organisms.  
R53 May cause long-term adverse effects in the aquatic environment.



## FICAM D

Version 6 / GB  
102000001385

10/10

Revision Date: 03.09.2012  
Print Date: 02.04.2013

Text of the hazard statements mentioned in Section 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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.

Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 453/2010.

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