



## FICAM D

Version 8 / GB  
10200001385

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Revision Date: 29.01.2015  
Print Date: 06.02.2015

### 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  
United Kingdom

Telephone 00800-1214 9451

Telefax +44(0)1223 426240

Responsible Department Email: [ukinfo@bayercropscience.com](mailto: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 in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Chronic aquatic toxicity: Category 2

H411 Toxic to aquatic life with long lasting effects.

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

N Dangerous for the environment, R51/53

#### 2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Bendiocarb



#### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

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EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

**Precautionary statements**

P501 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.

**2.3 Other hazards**

No other hazards known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**

Dustable powder (DP)  
Bendiocarb 1,25 % 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. /<br>EC-No.     | Classification                    |  | Conc. [%] |
|------------|-------------------------|-----------------------------------|--|-----------|
|            |                         | EC Directive<br>67/548/EEC        | Regulation (EC) No<br>1272/2008  |           |
| Bendiocarb | 22781-23-3<br>245-216-8 | T; R23/25<br>Xn; R21<br>N; R50/53 | Acute Tox. 3, H331<br>Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | 1.25      |
| Talc       | 14807-96-6<br>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** Rinse immediately with plenty of water and seek medical advice.

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**Ingestion** 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**

**Symptoms** 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.

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

**Unsuitable** 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 carbamates, 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 and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**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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**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

**Precautions** 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**

**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.

**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**

**Requirements for storage areas and containers** Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Protect from freezing.

**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><br>(TWA) |        | OES BCS* |



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|                                 |            |                               |         |           |
|---------------------------------|------------|-------------------------------|---------|-----------|
| Talc<br>(Respirable dust.)      | 14807-96-6 | 1 mg/m <sup>3</sup><br>(TWA)  | 12 2011 | EH40 WEL  |
| Talc<br>(Total inhalable dust.) | 14807-96-6 | 10 mg/m <sup>3</sup><br>(TWA) | 2007    | KE OEL RL |
| Talc<br>(Respirable dust.)      | 14807-96-6 | 1 mg/m <sup>3</sup><br>(TWA)  | 2007    | KE OEL RL |

\*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 of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and 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 coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type 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.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

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

### 9.2 Other information

Further safety related physical-chemical data are not known.



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## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

**Thermal decomposition** 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.

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## 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

**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.

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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity



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**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 (Daphnia magna (Water flea)) 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** Bendiocarb:  
not rapidly biodegradable

**Koc** Bendiocarb: Koc: 33

### 12.3 Bioaccumulative potential

**Bioaccumulation** Bendiocarb: Bioconcentration factor (BCF) 6.0  
Does not bioaccumulate.

### 12.4 Mobility in soil

**Mobility in soil** Bendiocarb: Mobile in soils

### 12.5 Results of PBT and vPvB assessment

**PBT and vPvB assessment** Bendiocarb: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

### 12.6 Other adverse effects

**Additional ecological information** No other effects to be mentioned.

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## 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.

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**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,<br>N.O.S.<br>(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,<br>N.O.S.<br>(BENDIOCARB MIXTURE) |
| 14.3 Transport hazard class(es) | 9   |
| 14.4 Packing group              | III   |
| 14.5 Marine pollutant           | YES   |

**IATA**

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





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## SECTION 15: REGULATORY INFORMATION

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

#### UK and Northern Ireland Regulatory References

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

#### Transport

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)

Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)

Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

#### Supply and Use

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009

Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)

EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits

Control of Pesticide Regulations 1986

Dangerous Substances and Explosive Atmospheres Regulations 2002

#### Waste Treatment

Environmental Protection Act 1990, Part II

Environmental Protection (Duty of Care) Regulations 1991

The Waste Management Licensing Regulations 1994 (as amended)

Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)

Landfill Directive

Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

Water Resources Act 1991

Anti-Pollution Works Regulations 1999

#### 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.

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## 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.

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

### 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.



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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.

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