



FICAM D

Version 11 / GB
102000001385

1/11
Revision Date: 10.08.2018
Print Date: 05.09.2018

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

1.4 Emergency telephone no.

Emergency telephone no. 00800 1020 3333 (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 1
H410 Very toxic to aquatic life with long lasting effects.

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



Signal word: Warning

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H410 Very toxic to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P391 Collect spillage.
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

May form explosible dust-air mixture if dispersed.

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

Dustable powder (DP)
Bendiocarb 1,25 % w/w

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

| Name | CAS-No. / EC-No. / REACH Reg. No. | Classification | Conc. [%] |
|------------|---|--|-----------|
| | | REGULATION (EC) No 1272/2008 | |
| Bendiocarb | 22781-23-3 245-216-8 | Acute Tox. 2, H300 Acute Tox. 3, H311 Acute Tox. 3, H331 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 | 1.25 |
| Talc | 14807-96-6 238-877-9 | Not classified | > 1.00 |

Further information

| | | |
|------------|------------|-------------------------------------|
| Bendiocarb | 22781-23-3 | M-Factor: 10 (acute), 100 (chronic) |
|------------|------------|-------------------------------------|

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**

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.



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| Inhalation | Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately. |
| Skin contact | Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. 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.) Call a physician or poison control center immediately. |

4.2 Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes., Bradycardia, Low blood pressure, Salivation, Bronchial hypersecretion, Vomiting, Diarrhoea, Sweating, Muscular fasciculation, Spasm, Breathing difficulties, Respiratory paralysis, Somnolence, Coma, Respiratory failure, Hypothermia, Convulsions, Nausea |
|-----------------|--|

4.3 Indication of any immediate medical attention and special treatment needed

| | |
|------------------|---|
| Risks | This product is a cholinesterase inhibitor carbamate. |
| Treatment | Monitor: respiratory, cardiac and central nervous system. Monitor: blood picture. Monitor: red blood cell and plasma cholinesterase. ECG - monitoring (Electrocardiogram). 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 antidote is generally accepted: atropine. Before antidote is administered, either clear symptoms of poisoning have to be present or the cholinesterase activity is inhibited to below 30% of normal. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. Contraindications: oximes (pralidoxime, obidoxime). |

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

| | |
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| Suitable | Water spray, Carbon dioxide (CO ₂), Foam, Sand |
| Unsuitable | None known. |



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| 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 it's 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., Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. |
| 5.3 Advice for firefighters | |
| Special protective equipment for firefighters | In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. |
| Further information | Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

| | |
|--------------------|---|
| Precautions | Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Remove all sources of ignition. |
| | Ensure adequate ventilation. Avoid dust formation. |

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 mechanical handling equipment. Avoid dust formation. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal. |
| 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 | Use only in area provided with appropriate exhaust ventilation. |
| Advice on protection against fire and explosion | Dust may form explosive mixture in air. Keep away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. |
| Hygiene measures | Avoid contact with skin, eyes and clothing. Keep working clothes |

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separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

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

Advice on common storage Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s) 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 ³ (TWA) | | OES BCS* |
| Talc (Respirable dust.) | 14807-96-6 | 1 mg/m ³ (TWA) | 12 2011 | EH40 WEL |

*OES BCS: Internal Bayer AG, Crop Science Division "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

If product is handled while not enclosed, and if contact may occur:
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

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Wash gloves when contaminated. 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.
Material Nitrile rubber



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|----------------------|--|
| Rate of permeability | > 480 min |
| Glove thickness | > 0.4 mm |
| Directive | Protective gloves complying with EN 374. |

Eye protection

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

Skin and body protection

Wear standard coveralls and Category 3 Type 4 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.
If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|-----------------------------------|
| Form | powder |
| Colour | grey white |
| Odour | odourless |
| Bulk density | 0.5 - 0.7 g/ml (loose) |
| Water solubility | immiscible |
| Partition coefficient: n-octanol/water | Bendiocarb: log Pow: 1.7 at 25 °C |

9.2 Other information Further safety related physical-chemical data are not known.

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

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|--|--|
| 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 corrosion/irritation | No skin irritation (Rabbit) |
| Serious eye damage/eye irritation | No eye irritation (Rabbit) |
| Respiratory or skin sensitisation | Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Magnusson & Kligman test Test conducted with a similar formulation. |

Assessment STOT Specific target organ toxicity – single exposure

Bendiocarb: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

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.

Aspiration hazard

Based on available data, the classification criteria are not met.

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 (Daphnia magna (Water flea)) 0.0377 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient bendiocarb. |
| Chronic toxicity to aquatic invertebrates | NOEC (Daphnia magna (Water flea)): 0.000882 mg/l Exposure time: 21 d |

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|| The value mentioned relates to the active ingredient bendiocarb.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 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.

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.
Do not re-use baits or empty containers.
Clean container with water.
Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations.

Waste key for the unused product 02 01 08* agrochemical waste containing hazardous substances

SECTION 14: TRANSPORT INFORMATION**ADR/RID/ADN**

14.1 UN number

3077



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| | |
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| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENDIOCARB MIXTURE) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging Group | III |
| 14.5 Environm. Hazardous Mark | YES |
| Hazard no. | 90 |

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 | 3077 |
| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENDIOCARB MIXTURE) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging 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 Packaging 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 Packaging 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 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

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



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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.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

| | |
|------|---|
| H300 | Fatal 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. |

Abbreviations and acronyms

| | |
|----------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| Conc. | Concentration |
| EC-No. | European community number |
| ECx | Effective concentration to x % |
| EH40 WEL | Worker Exposure Limit |



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| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| EN | European Standard |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) |
| ICx | Inhibition concentration to x % |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal concentration to x % |
| LDx | Lethal dose to x % |
| LOEC/LOEL | Lowest observed effect concentration/level |
| MARPOL | MARPOL: International Convention for the prevention of marine pollution from ships |
| N.O.S. | Not otherwise specified |
| NOEC/NOEL | No observed effect concentration/level |
| OECD | Organization for Economic Co-operation and Development |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SI | Statutory Instrument |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 2015/830. The following sections have been revised: Section 2: Hazards Identification. Section 8: Exposure Controls / Personal Protection. Section 9: Physical and Chemical Properties. Section 12. Ecological information.

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