

 FICAM D

 Version 11 / GB
 Revision Date: 10.08.2018

 102000001385
 Print Date: 17.08.2018

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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Hazard statements

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. / | Classification | Conc. [%] |
|------------|----------------------------|--|-----------|
| | EC-No. / REACH Reg. No. | 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

Suitable Water spray, Carbon dioxide (CO2), 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

П

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 upUse 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/m3 | | OES BCS* |
| | | (TWA) | | |
| Talc | 14807-96-6 | 1 mg/m3 | 12 2011 | EH40 WEL |
| | | (TWA) | | |
| (Respirable dust.) | | | | |

^{*}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

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

Acute dermal toxicity LD50 (Rat) > 5,000 mg/kgSkin corrosion/irritation No skin irritation (Rabbit) Serious eye damage/eye No eye irritation (Rabbit)

irritation

Respiratory or skin Non-sensitizing. (Guinea pig)

sensitisation 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.

EC50 (Daphnia magna (Water flea)) 0.0377 mg/l

Toxicity to aquatic

invertebrates Exposure time: 48 h

The value mentioned relates to the active ingredient bendiocarb.

Chronic toxicity to aquatic

NOEC (Daphnia magna (Water flea)): 0.000882 mg/l

invertebrates 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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14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(BENDIOCARB MIXTURE)

14.3 Transport hazard class(es)914.4 Packaging GroupIII14.5 Environm. Hazardous MarkYESHazard 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)
14.4 Packaging Group
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)
14.4 Packaging Group
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)914.4 Packaging GroupIII14.5 Environm. Hazardous MarkYESEmergency action code2Z

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.

noot in innaled.

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) Inhibition concentration to x %

IMDG International Maritime Dangerous Goods

LCx Lethal concentration to x %

LDx Lethal dose to x %

ICx

LOEC/LOEL Lowest observed effect concentration/level

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.