

Safety Data Sheet

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REVISION (see box 16)

Issue : 06 25 : 02 : 2010

| 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY | | |
|---|--|-----------------|
| Product Name | BENDIOCARB DUSTING POWDER | HSE 5125 |
| Description | A fine, off-white powder with no perceptible odour. For professional use as an insecticidal dusting powder in the control of a wide range of insect pests in public hygiene and industrial situations. | |
| Company | Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1293 858 000 E-mail: sds@rentokil.com | |

| 2 HAZARD IDENTIFICATION | | |
|--|--------|---|
| Classification (Supply – Use) : In compliance with EC Directive 1999/45. | | |
| N Dangerous for the environment | R51,53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11): | | |
| This product contains an anticholinesterase carbamate compound. Excessive or prolonged inhalation may cause dizziness, headache, excessive sweating, abdominal pain, salivation, lachrymation, bradycardia, bronchoconstriction, muscular twitching, unconsciousness, convulsions and paralysis. Direct contact with eyes could lead to temporarily impaired vision. Symptoms of ingestion are mainly as for inhalation, plus nausea and vomiting. | | |
| Prolonged or repeated exposure with product may cause skin dryness and may cause eye irritation and smarting. | | |
| No other significant adverse effects expected under normal conditions of handling and use. | | |

| 3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16) | | |
|--|---|---|
| % w/w | Common*/Chemical Name, ELINCS/EINECS & CAS No. of Ingredients | EC 1999/45 Classification |
| 0.96 | Bendiocarb* / 2,2-dimethyl-1,3-benzodioxol-4-yl N-methylcarbamate EINECS : 245-216-8 CAS : 22781-23-3 | T : R23/25 : R21 N : R50,53 |
| >25.0 ≤50.0 | Calcium carbonate* EINECS : 207-439-9 CAS : 471-34-1 | Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8). |
| >25.0 ≤50.0 | Talc* EINECS : 238-877-9 CAS : 14807-96-6 | Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8). |
| > 1.0 ≤2.5 | Quartz* EINECS : 238-878-4 CAS : 14808-60-7 | Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8). |
| ≤0.1 | Silica, amorphous* EINECS : 231-545-4 CAS : 7631-86-9 | Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8). |

| 4 FIRST-AID MEASURES (SEE ALSO “ADVERSE EFFECTS” IN BOX 2) | |
|---|--|
| Inhalation | Remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention. |
| Eye Contact | Rinse affected eye with clean running water, or eyewash solution, for at least 15 minutes holding eyelids well apart. Rinse entire surface and do not allow run-off to contaminate unaffected eye. Seek medical attention. |
| Skin Contact | Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice. |
| Ingestion (Swallowing) | Do NOT induce vomiting. If unconscious place in the recovery position and apply supportive measures if necessary. If conscious give patient up to ½ litre or 1 pint of water to drink. Seek medical attention. |
| Emergency Equipment Suggested | Appropriate first-aid equipment should be provided. For the UK this should be in accordance with the Health & Safety (First-Aid) Regulations 1981. See also the Approved Code of Practice “First-aid at Work”. |
| Note To Doctor | Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK. |

| 5 FIRE FIGHTING MEASURES | |
|---|--|
| Fire Extinguisher Type | Product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials. |
| Special Fire-Fighting Procedures | Wear suitable personal protective equipment. |
| Special Exposure Hazards | Decomposes above 125°C liberating toxic fumes of methyl isocyanate that are strongly lacrimatory and carbon dioxide. |

| 6 ACCIDENTAL RELEASE MEASURES | |
|--|--|
| Personal Precautions (See also box 8) | Wear suitable personal protective equipment. |
| Environmental Precautions | This product is classified as dangerous for the environment. Keep away from drains, surface and ground water, and soil. |
| Clean-up Procedure (See also box 13) | Gather up spilt material being careful not to create dust clouds and transfer to a suitable container for subsequent disposal. |

| 7 HANDLING AND STORAGE (SEE ALSO BOX 8) | |
|--|--|
| Handling | Do not breathe dust. |
| Storage | Store in original container in a cool, dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuffs. |

| 8 EXPOSURE CONTROLS/PERSONAL PROTECTION | |
|--|--|
| Exposure Standard - Directive EC/98/24 (1st IOELV Directive) | WHO Operator Exposure Standard for bendiocarb is 0.2mg/m ³ . Workplace Exposure Limit (WEL) for silica, amorphous is 6 mg/m ³ long-term exposure (8 hour Time Weighted Average (8hr TWA)) for inhalable dust and 2.4 mg/m ³ long-term exposure (8hrTWA) for respirable dust. WEL for talc, respirable dust is 1 mg/m ³ long-term exposure (8hr TWA). WEL for quartz is 0.1 mg/m ³ long-term exposure (8hr TWA). Quartz is referred to as silica, respirable crystalline in Directive EC/98/24 (1 st IOELV Directive). WEL for calcium carbonate (inhalable dust) is 10 mg/m ³ long-term exposure (8hrTWA) for inhalable dust and 4 mg/m ³ long-term exposure (8hrTWA) for respirable dust. WEL for dust is 10 mg/m ³ long-term exposure (8hr TWA) for inhalable dust and 4 mg/m ³ long-term exposure (8hr TWA) for respirable dust. |
| Engineering Controls | Where exposure may occur, engineering controls, rather than the provision of Personal Protective Equipment (PPE) should be employed. On completion of a risk assessment, the following PPE may be required: |
| Eye Protection | Suitable eye protection such as goggles. |
| Hand Protection | Suitable hand protection such as gloves. |
| Skin Protection | Suitable skin protection such as coveralls. |
| Breathing Protection | Suitable respiratory protection such as self-contained breathing apparatus. See HSE Guidance Booklet HS (G) 53: “The Selection, Use and Maintenance of Respiratory Protective Equipment – A Practical Guide.” |
| Environmental Exposure Controls | Use only in accordance with instructions given. |

| 9 PHYSICAL AND CHEMICAL PROPERTIES | | | |
|---|---|-------------------------------------|---|
| Appearance and Odour | A fine, off-white powder with no perceptible odour. | | |
| pH | Not applicable. | Solubility in Water | Virtually insoluble. |
| Density | Approximately 0.70 g/cm ³ | Solubility in Other Solvents | Virtually insoluble. |
| Flash Point | >125°C | Explosive Properties | None known. |
| Flammability | Non-flammable. | Combustibility | Non-combustible. |
| Boiling Point/Range | Not applicable. | Oxidising Properties | None known. |
| Vapour Density | Not applicable. | Evaporation Rate | Not applicable. |
| Vapour Pressure | Not applicable. | Partition Coefficient | Not applicable. |
| Viscosity | Not applicable. | Other Data | Decomposes above 125°C liberating toxic fumes of methyl isocyanate that are strongly lacrimatory. |

BENDIOCARB DUSTING POWDER

10 STABILITY AND REACTIVITY

| | |
|-------------------------------------|--|
| Conditions to avoid | Avoid extremes of temperature, e.g. below 0°C and above 40°C. Avoid direct sunlight. |
| Materials to avoid | Avoid contact with acids. |
| Hazardous Breakdown Products | Decomposes above 125°C liberating toxic fumes of methyl isocyanate that are strongly lacrimatory and carbon dioxide. |

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

| | | |
|-------------------------------|-------------------|---|
| Acute Toxicity | Oral | For bendiocarb: LD ₅₀ (rats): 40-156 mg/kg For bendiocarb: LD ₅₀ (mice): 45 mg/kg |
| | Inhalation | For bendiocarb: LC ₅₀ (4h) (rats): 0.55 mg/L |
| Corrosivity/Irritation | Dermal | For bendiocarb (80%): LD ₅₀ (rat): > 1000 mg/kg |
| | Skin | For bendiocarb: Non-irritant for rats. Prolonged or repeated exposure with product may cause skin dryness. |
| | Eyes | For bendiocarb: Non-irritant for rats. Product may cause irritation and smarting. |
| Sensitisation | Respiratory tract | Product may irritate respiratory system. Symptoms may include coughing, expectoration, sneezing and difficulty breathing due to upper respiratory tract irritation. |
| | Skin | Contains no known skin sensitisers. |
| | Respiratory | Contains no known respiratory sensitisers. |
| Repeat-Dose Toxicity | | For bendiocarb: NOEL (90d) and (2y) (rats): 10 mg/kg diet. |
| Mutagenicity | | Product does not contain any components known to have a mutagenic effect. |
| Carcinogenicity | | Product does not contain any components known to have a carcinogenic effect. |
| Reproductive Toxicity | Fertility | Product does not contain any components known to have effects on fertility. |
| | Development | Product does not contain any components known to be toxic to the reproductive system. |
| Other Information | | None known. |


12 ECOLOGICAL INFORMATION

| | |
|--------------------------------------|--|
| General Information | This product is classified as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, when used in accordance with instructions given, controlled release of this product is not expected to cause environmental contamination. |
| Ecotoxicity Data | For bendiocarb: Fish: LC ₅₀ , (96h), sheepshead minnows: 0.86 mg/L Daphnia: LC ₅₀ , (48h): 0.16 mg/L EC ₅₀ , (48h), <i>Daphnia magna</i> : 0.0377 mg/L Algae: EC ₅₀ , (48h), <i>Pseudokirchneriella subcapitata</i> : 0.408 mg/L Toxic to bees. |
| Mobility | Not determined. |
| Persistence and Degradability | Not determined. |
| Bioaccumulative Potential | For Bendiocarb: Bioconcentration Factor (BCF): 6 (Bluegill sunfish). |
| Other Adverse Effects | None known. |

13 DISPOSAL CONSIDERATIONS

| | | | | | |
|---|--|--|---------------------------|------------|------|
| Disposal of Waste / Containers | This product is dangerous for the environment. Do not discharge to sewers, drains or watercourses. This product must be disposed of as hazardous waste. Empty containers may be disposed of as controlled waste in accordance with the appropriate regulations. Under normal circumstances, waste product / empty containers will be disposed of by Rentokil Initial. | | | | |
| Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC) | Hazard Code: H14 - Ecotoxic | | | | |
| Note for Disposal | <table border="0"><tr><td><u>Components making the waste hazardous</u></td><td><u>Concentrations (%)</u></td></tr><tr><td>Bendiocarb</td><td>0.96</td></tr></table> The best means of disposal of any product is through proper use according to the label. For further advice about disposal in the UK, contact the local office of the Environment Agency (England and Wales) or Scottish Environment Protection Agency. Local rate from anywhere in the UK: +44(0) 870 850 6506 | <u>Components making the waste hazardous</u> | <u>Concentrations (%)</u> | Bendiocarb | 0.96 |
| <u>Components making the waste hazardous</u> | <u>Concentrations (%)</u> | | | | |
| Bendiocarb | 0.96 | | | | |

BENDIOCARB DUSTING POWDER

| 14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED) | | | |
|---|---|----------------|---|
| UN No. | UN3077 | | RIS Code |
| Transport Category | 3 | UK Hazchem EAC | 2Z PSB05 PSB181 |
| ADR 2009 (International Road) | Class 9 ADR HIN 90 | | Labels |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (contains bendiocarb). | |  |
| Limited Quantity Exemptions | Maximum quantity per inner receptacle is 6 kg. Maximum quantity per outer package is 30 kg. Combination packs only. | | |
| Special Requirements | Not required. Packing Group III | | |
| IMDG 2008 (Sea) | Class 9 IMDG EMS F-A, S-F | | |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (contains bendiocarb). | | |
| Limited Quantity Exemptions | Maximum quantity per inner receptacle is 5 kg. Maximum quantity per outer package is 30 kg. Combination packs only. | | |
| Special Requirements | Not required. Packing Group III. | | |
| Note for Transport | Local, State or National requirements may apply to the carriage of this product. | | |

| 15 REGULATORY INFORMATION (HEALTH AND SAFETY INFORMATION (SEE ALSO BOX 2)) | |
|--|---|
| Safety Phrases | <p>S35 This material and its container must be disposed of in a safe way.</p> <p>S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).</p> <p>S57 Use appropriate containment to avoid environmental contamination.</p> <p>S61 Avoid release to the environment. Refer to special instructions/safety data sheet.</p> |
| Additional Label Phrases | To avoid risks to man and the environment, comply with the instructions for use. |
| Legislation | <p>Labelling is in accordance with UK regulations implementing the EC Directive 1999/45.</p> <p>Additional labelling requirements may be necessary in accordance with other National legislation. Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times.</p> <p>The information given on this Safety Data Sheet (SDS) does not constitute an assessment in accordance with Control of Substances Hazardous to Health (COSHH) Regulations 2002, in the UK. Other National measures or guidance should be followed where appropriate.</p> |

| 16 Other Information and indication of revisions | |
|---|---|
| Packaging Information | 500g in a plastic tube and 1kg in a polyethylene lined paper bag. |
| Revisions | Changes have been made to the content of boxes 01, 02, 03, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 05. |
| Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases) | <p>R21 : Harmful in contact with skin.</p> <p>R23/25 : Toxic by inhalation and if swallowed.</p> <p>R50,53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> |

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Before using any product, ensure that you read and understand its label.

The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time of publication. The information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is used in combination with any other material(s) or any other use than that specified herein. Rentokil Initial UK Ltd is not liable for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.

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