

For use only as an agricultural fungicide for the control of black scurf (Rhizoctonia solani), and reduction of silver scurf (Helminthosporium solani), stem canker (Rhizoctonia solani) and skin spot (Polyscytalum pustulans) in potatoes.

A dustable powder formulation for dry, seed potato treatment containing 12.5% w/w pencycuron and 0.6% w/w imazalil

Bayer CropScience Limited, Bayer Limited

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For 24 hour emergency information contact

Bayer CropScience Limited Telephone: 1 800 409 399

SAFETY PRECAUTIONS

Operator ProtectionWEAR SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT (CONFORMING TO EN 149 FFP2 OR EN 149 FFP3) AND SUITABLE PROTECTIVE GLOVES when handling the product.

WEAR SUITABLE PROTECTIVE GLOVES when handling treated potatoes.
WEAR SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT (CONFORMING TO EN 149 FFP2 OR EN 149 FFP3) when applying the dust to potatoes, filling the hopper and riding on the planter. WASH HANDS AND EXPOSED SKIN before meals and after work.

LABEL TREATED SEED with the appropriate precautions using printed sacks, labels or bag tags.

Environmental Protection
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container. (Do not clean application equipment near surface water / Avoid contamination via drains from farmyards and roads.)

Storage and Disposal

KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

EMPTY CONTAINER COMPLETELY and dispose of safely LABEL TREATED SEED with the appropriate precautions using printed sacks, labels, or bag tags

READ ALL INSTRUCTIONS CAREFULLY BEFORE USE

Safety Information

MONCEREN IM

Contains 12.5% w/w pencycuron and 0.6% w/w imazalil



Toxic to aquatic life with long lasting effects

Dispose of contents/container in accordance with local regulation Contains imazalil sulphate. May produce an allergic reaction

To avoid risks to human health and the environment, comply with the instructions

PCS No. 00672

DIRECTIONS FOR USE

These instructions for use as set out below are current at the time of printing and you are advised to disregard all previous instructions

DESCRIPTION

Monceren IM is a dry powder seed treatment containing pencycuron 12.5% w/w and imazalil 0.6% w/w, recommended for the control of black scurf (*Rhizoctonia solani*) and a reduction in silver scurf (Helminthosporium solani), stem canker (R. solani) and skin spot (Polyscytalum pustulans) on daughter tubers. The fungus Rhizoctonia solani is able to exist freely in soils, but the black sclerotia (fungal resting bodies) present on infected tubers usually act as a more important source of disease infection. Similarly, silver scurf (Helminthosporium solani), stem canker (R. solani) and skin spot (Polyscytalum pustulans) are predominantly

Monceren IM acts primarily against tuber-borne infections of *Rhizoctonia* and silver scurf although useful control of Rhizoctonia arising from the soil-borne infections can also be expected.

RESTRICTIONS

BEFORE USING MONCEREN IM ALWAYS CHECK THE LATEST GUIDELINES FOR THE USE OF MONCEREN PRODUCTS, AVAILABLE FROM BAYER CROPSCIENCE LIMITED OR YOUR MONCEREN IM SUPPLIER CONSULT PROCESSOR BEFORE USING ON CROPS FOR PROCESSING.

Crop	Maximum individual dose	Maximum number of applications	Latest time of application	Specific pests controlled
Potato – all varieties	2.0 kg product per tonne seed	One per batch	At planting	Black scurf and reduction of silver scurf, stem canker and skin spot

DISEASES AND PESTS CONTROLLED

The possible development of disease strains resistant to Monceren IM cannot be excluded or predicted. Where such resistant strains occur, Monceren IM is unlikely to give satisfactory control.

A strategy for preventing and managing such resistance should be adopted. Guidelines have been produced by the Fugicide Resistance Action Group (FRAC) and copies are available from your distributor, crop advisor or product manufacturer.

Rhizoctonia solani Helminthosporium solani

Polyscytalum pustulans

CROP SPECIFIC INFORMATION

Monceren IM is for use on seed tubers of all varieties grown as first or second earlies, main or seed crops.

Potatoes for pre-packing or processing

In extensive independent tests carried out over several years, Monceren IM has never resulted in any taints or changes in the flavour of fresh, cooked or processed potatoes, but processors should always be consulted before using Monceren IM on crops for processing.

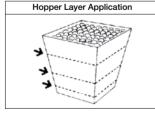
RATE OF APPLICATION

2.0 kg of Monceren IM per tonne of seed tubers (3.6 oz per cwt) immediately prior to planting. Application method

Monceren IM is applied to seed tubers during the planting process with automatic potato planters. It is essential to obtain an even distribution of the product on the tubers for optimum efficacy. The action of the potato planter achieves this very efficiently provided Monceren IM is initially distributed to some extent within the hopper load

Measure the quantity of Monceren IM required to treat a hopper load of seed tubers. One quarter fill the hopper with seed tubers, sprinkle over the tubers one third of the required quantity of Monceren IM, add a further quarter of the seed tubers and sprinkle a further third of the Monceren IM over the tubers, and so on in layers until the hopper is completely filled with seed tubers. Thus three layers of Monceren IM have been sandwiched between four layers of seed tubers - refer to pictogram on side of pack.

Depending on the size and shape of the hopper, the number of layers required may be increased, but even coverage of Monceren IM on the tubers is essential when they are planted.



Three layers of Monceren IM should be sandwiched between four layers of seed tubers

IMPORTANT NOTES

If seed tubers become damp from light rain, the distribution of Monceren IM on the tubers at planting should not be affected. If, however, a rain shower interrupts planting, the tubers in the hopper should be covered in accordance with normal practice.

Tubers treated with Monceren IM may be used only as seed. They must not be used for human or animal consumption.

Growers are advised to carefully check seed tuber health before applying Monceren IM.

Potato seed tubers to be treated with seed treatments, including Monceren IM, should be of good quality and vigour (i.e. free from conditions such as bacterial rots, physical damage, virus infection, etc.). Crop establishment

may be impaired where seed is affected by the conditions above irrespective of any subsequent seed treatment **TUBER HANDLING DAMAGE**

Any damage occurring to tubers or sprouts/chits during handling, treatment or planting may adversely affect

their subsequent performance and cropping OTHER SEED TREATMENTS

Monceren IM should NOT be used on seed tubers which have previously been treated with another dry powder

seed treatment or where hot water treatment is used.

MIXING - not applicable

There are no Bayer CropScience Limited recommendations for the use of Monceren IM in conjunction with any seed tuber treatment

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SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

MONCEREN IM

E80508239c

Version 4 / IRI Revision Date: 11.07.2014 102000007045

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

1.1 Product identifier

Trade name Product code (UVP) MONCEREN IM 04368568

1.2 Relevant identified uses of the substance or mixture and uses advised against

Fungicide, Seed treatment 1.3 Details of the supplier of the safety data sheet

Bayer CropScience Limited, Bayer Limited
The Atrium, Blackthorn Road, Sandyford, Dublin 18

+353-1-2999313

Responsible Department Email: ukinfo@bayercropscience.com

1.4 Emergency telephone no. Emergency telephone no. 1800-409-399

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

R52/53

Telephone

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:

Imazalil sulphate



Hazard statements

Toxic to aquatic life with long lasting effects.

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

EUH208 Contains imazalil sulfate. May produce an allergic reaction.

Precautionary statements

P501 Dispose of contents/container in accordance with local regulation. 2.3 Other hazards

Dust may form explosive mixture in air SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures Chemical nature

Powder for dry seed treatment (DS)

Imazalil sulphate/Pencycuron 0.8:12,5 % w/w Hazardous components

R-phrase(s) according to EC directive 67/548/EEC ording to Regulation (FC) No. 1907/2006

Name	CAS-No. /	Classification	Classification	
	EC-No.	EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
lmazalil sulphate	58594-72-2 281-291-3	Xn; R22 R43 N; R50/53	Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	0.80
Pencycuron	66063-05-6 266-096-3	Not classified	Aquatic Chronic 1, H410	12.50
White mineral oil	8042-47-5 232-455-8	Not classified	Asp. Tox. 1, H304	> 1.00 - < 10.00
Kaolin	1332-58-7 310-194-1	Not classified	Not classified	> 1.00
Talc	14807-96-6 238-877-9	Not classified	Not classified	> 1.00

Further information

Skin contact

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

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely. Move to fresh air. Keep patient warm and at rest. Call a physician or poison control Inhalation center immediately.

400, subsequently rinse with water. If symptoms persist, call a physician Eve 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.

Rinse mouth. Do NOT induce vomiting. Call a physician or immediately.

4.2 Most important symptoms and effects, both acute and delayed

No symptoms known or expected Symptoms 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. 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. There is no specific

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media Suitable

Water spray, Carbon dioxide (CO2), Foam, Sand 5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:, Hydrogen chloride (HCI), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx)

5.3 Advice for firefighters

Further information

Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear selfcontained breathing apparatus.

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

Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Remove all sources of ignition. Precautions

Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

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

Use mechanical handling equipment. Clean contaminated floors and

objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

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

Hygiene measures

No specific precautions required when handling unopened packs/containers; follow Advice on safe handling relevant manual handling advice. Ensure adequate ventilation

Advice on protection against fire and explosion Dust may form explosive mixture in air. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. 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 wellventilated place. Store in a place accessible by authorized persons only. Keep away

from direct sunlight. Keep away from food, drink and animal feedingstuffs

Advice on common storage Polvethylene film within an outer package Suitable materials Refer to the label and/or leaflet. 7.3 Specific end uses

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Pencycuron	66063-05-6	5 mg/m3 (TWA)		OES BCS*
Kaolin (Respirable dust.)	1332-58-7	2 mg/m3 (TWA)	2011	ELV (IE)
Talc (Total inhalable dust.)	14807-96-6	10 mg/m3 (TWA)	2011	ELV (IE)
Talc (Respirable dust.)	14807-96-6	0.8 mg/m3 (TWA)	2011	ELV (IE)

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard" 8.2 Exposure controls

Hand protection

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.

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)

Wear standard coveralls and Category 3 Type 5 suit. Skin and body protection 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

Coloui red

Odour weak, characteristic

4.5 - 6.5 at 1 % (23 °C) (deionized water) pН

capable of causing a dust explosion (modified Hartmann tube, ignition with continuous spark generator) **Dust explosion class**

Water solubility Not dispersible

Partition coefficient: noctanol/water

Imazalil sulphate: log Pow: 3.31

Pencycuron: log Pow: 4.68 at 20 °C Impact Sensitivity Not impact sensitive.

Combustion number CN3 Local combustion without spreading 9.2 Other information

Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition from 140 °C Exothermic decomposition

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) > 5,000 mg/kg

Acute inhalation toxicity LC50 (rat) > 0.401 mg/l Determined in the form of a respirable fine dust

Highest attainable concentration LD50 (rat) > 5,000 mg/kg

Acute dermal toxicity Skin irritation No skin irritation (rabbit)

Eye irritation Slight irritant effect - does not require labelling. (rabbit) Assessment repeated dose toxicity

Pencycuron did not cause specific target organ toxicity in experimental animal studies. Imazalii sulphate did not cause specific target organ toxicity in experimental animal studies

Assessment Mutagenicity Pencycuron was not mutagenic or genotoxic in a battery of in vitro and in vivo tests

Imazalil sulphate was not mutagenic or genotoxic in a battery of in vitro and in vivo tests

Assessment Carcinogenicity
Pencycuron was not carcinogenic in lifetime feeding studies in rats and mice.

Imazalil sulphate was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction Pencycuron caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic

to the parent animals. The reproduction toxicity seen with Pencycuron is related to parental toxicity mazalii sulphate did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Pencycuron did not cause developmental toxicity in rats and rabbits

Imazalil sulphate caused developmental toxicity only at dose levels toxic to the dams.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish

LC50 (Lepomis macrochirus (Bluegill sunfish)) > 0.26 mg/l Exposure time: 96 h

The value mentioned relates to the active ingredient pencycuron. No acute toxicity was observed at its limit of water solubility.

LC50 (Rainbow trout (Oncorhynchus mykiss)) 1.48 mg/l Exposure time: 96 h
The value mentioned relates to the active ingredient imazalii. EC50 (Water flea (Daphnia magna)) > 1.0 mg/

Toxicity to aquatic Exposure time: 48 h The value mentioned relates to the active ingredient pencycuron.

No acute toxicity was observed at its limit of water solubility. EC50 (Water flea (Daphnia magna)) 3.5 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imazalil.

Chronic toxicity to aquatic invertebrates

NOEC (Daphnia): 0.0992 mg/l Exposure time: 21 d

The value mentioned

EC50 (Desmodesmus subspicatus) > 1 mg/l

Toxicity to aquatic plants Growth rate: Exposure time: 72 h

The value mentioned relates to the active ingredient pencycuron. No acute toxicity was observed at its limit of water solubility. EC50 (Pseudokirchneriella subcapitata) 0.87 mg/l Biomass; Exposure time: 72 h

The value mentioned relates to the active ingredient imazalil.

12.2 Persistence and degradability
Biodegradability Imazalil sulphate: Biodegradability

not rapidly biodegradable Pencycuron not rapidly biodegradable Imazalil sulphate: Koc: 4753 Pencycuron: Koc: 5667

12.3 Bioaccumulative potential Bioaccumulation

Koc

Does not bioaccumulate. Pencycuron: Bioconcentration factor (BCF) 226
Does not bioaccumulate.

12.4 Mobility in soil Imazalil sulphate: Immobile in soil

Mobility in soil Pencycuron: Immobile in soil

12.5 Results of PBT and vPvB assessment

Imazalil sulphate: This substance is not considered to be persistent,

PBT and vPvB assessment

bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB)

Pencycuron: 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

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable

local guidelines. Contaminated packaging Empty remaining contents

Do not use containers for other products

Dispose of empty and cleaned packaging safely. Follow advice on product label and/or leaflet.

Waste key for the unused product 020108 agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION ADR/RID/ADN

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

(PENCYCURON MIXTURE) 14.3 Transport hazard class(es) 9

14.4 Packing group 14.5 Environm. Hazardous Mark YES Hazard no. 90 Tunnel Code Ε

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 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. 14.2 Proper shipping name (PENCYCURON MIXTURE)

14.3 Transport hazard class(es) 9 14.4 Packing group 14.5 Marine pollutant YES IATA

14.1 UN number 3077

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(PENCYCURON MIXTURE)

14.3 Transport hazard class(es) 9

14.4 Packing group 14.5 Environm, Hazardous Mark YES 14.6 Special precautions for user See sections 6 to 8 of this Safety Data Sheet.

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

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

Supply and Use

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

European Communities (Prohibition of Certain Active Substances in Plant Protection Products) Regulations 1981 (SI No 320/1981) European Communities (Authorization, Placing on the Market, Use and Control of Plant Protection

Products) Regulations 2003 (SI No 83/2003) European Communities (Classification, Packaging and Labelling of Plant Protection Products and

Biocide Products) Regulations 2001 (SI No 624/2001 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001

(SI No 619/2001)

Waste Treatment

Landfill Directive

H400

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

Further information WHO-classification: III (Slightly hazardous)

15.2 Chemical Safety Assessment

A chemical safety assessment is not required. SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3 R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact. 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 H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways. May cause an allergic skin reaction. H317

H410 Very toxic to aquatic life with long lasting effects. The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 453/2010 amending Regulation (EU) No 1907/2006 (and any subsequent

amendments). This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements

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

Very toxic to aquatic life.