

**MERIT TURF**Version 5 / GB
1020000078821/8
Revision Date: 09.02.2012
Print Date: 20.02.2012**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name	MERIT TURF
Product code (UVP)	05666341
Usage	Insecticide
Company	Bayer Environmental Science 230 Cambridge Science Park Milton Road Cambridge Cambridgeshire CB4 0WB Great Britain
Telephone	+44(0)1223 226500
Telefax	+44(0)1223 426240
Responsible Department	Email: ukinfo@bayercropscience.com
Emergency telephone no.	0800-220876 (UK 24 hr) +44(0)1603-242424 (Overseas 24 hr)

2. HAZARDS IDENTIFICATION**Risk advice to man and the environment**

Irritating to eyes.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Granule (GR)
Imidacloprid 0,5%

Hazardous components

Name	CAS-No. / EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Imidacloprid	138261-41-3 428-040-8	Xn, N	R22, R50/53	0.50
White mineral oil	8042-47-5 232-455-8	Xn	R65	> 1.00 - < 10.00
Silica, amorphe	7631-86-9 231-545-4			> 1.00

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES



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General advice

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

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Call a physician or poison control center immediately.

Ingestion

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

Notes to physician

Treatment

|| Treat symptomatically.
|| Monitor: respiratory and cardiac functions.
|| 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 antidote.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Extinguishing media which shall not be used for safety reasons

|| High volume water jet

Specific hazards during firefighting

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

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

Contain the spread of the fire-fighting media.
Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with spilled product or contaminated surfaces.
Use personal protective equipment.



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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).

Methods for cleaning up

Use mechanical handling equipment.
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice

- Information regarding safe handling, see section 7.
- Information regarding personal protective equipment, see section 8.
- Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling

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

Advice on protection against fire and explosion

- No special precautions required.

Storage

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

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Suitable materials

HDPE (high density polyethylene)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0.7 mg/m ³ (TWA)		OES BCS*
Silica, amorphe (Inhalable dust.)	7631-86-9	6 mg/m ³ (TWA)	2007	EH40 WEL
Silica, amorphe (Respirable dust.)	7631-86-9	2.4 mg/m ³ (TWA)	2007	EH40 WEL



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

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 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands 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 coverall and type 5 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.
Hygiene measures	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt). Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	granular
Colour	grey
Odour	weak, characteristic

Safety data

pH	ca. 8.8 at 10 % (23 °C) (deionized water)
Water solubility	at 20 °C insoluble

10. STABILITY AND REACTIVITY



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Conditions to avoid	Extremes of temperature and direct sunlight.
Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50 (rat) > 2,500 mg/kg
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	Irritating to eyes. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test

Assessment repeated dose toxicity
Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity
Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

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

Assessment Toxicity to Reproduction
Imidacloprid 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 Imidacloprid is related to general toxicity.

Assessment developmental toxicity
Imidacloprid caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 211 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient imidacloprid.
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Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) 85 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imidacloprid.
Toxicity to aquatic invertebrates	LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l Exposure time: 24 h The value mentioned relates to the active ingredient imidacloprid.
Toxicity to aquatic plants	EC50 (Desmodosmus subspicatus) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient imidacloprid.

13. DISPOSAL CONSIDERATIONS**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.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION**ADR/RID/ADN**

UN-Number	3077
Labels	9
Packaging group	III
Hazard no.	90
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)
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

UN-Number	3077
Labels	9
Packaging group	III
EmS	F-A , S-F



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Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)

IATA

UN-Number	3077
Labels	9
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)

UK 'Carriage' Regulations

UN-Number	3077
Labels	9
Packaging group	III
Hazard no.	90
Emergency action code	2Z
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)

15. REGULATORY INFORMATION

This product has been classified/labelled in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009: CHIP 4 and any subsequent amendments which apply in both the United Kingdom and Northern Ireland.

Classified as hazardous for supply/use.

Hazardous components which must be listed on the label:

- Imidacloprid
- White mineral oil

Symbol(s)

Xi	Irritant
N	Dangerous for the environment

R-phrases(s)

R36	Irritating to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

To avoid risks to man and the environment, comply with the instructions for use.

S-phrases(s)

S35	This material and its container must be disposed of in a safe way.
S57	Use appropriate container to avoid environmental contamination.

CLASSIFICATION ACCORDING TO SPECIFIC UK REGULATIONS:

The labelling information below is that which has been approved under 'The Control of Pesticides Regulations 1986' and/or 'Part III of the Food and Environment Protection Act 1985' and/or 'Plant Protection Product Regulations 1999' and any subsequent amendments



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and may differ from that indicated by any toxicological and/or other testing otherwise indicated in this 'Safety Data Sheet'.

Symbol(s)

Xi Irritant

R-phrases(s)

R36 Irritating to eyes.

S-phrases(s)

S 2 Keep out of the reach of children.
S13 Keep away from food, drink and animal feedingstuffs.
S35 This material and its container must be disposed of in a safe way.
S37 Wear suitable gloves.
S46 If swallowed, seek medical advice immediately and show this container or label.

Further information

WHO-classification: III (Slightly hazardous)

16. OTHER INFORMATION

Further information

Text of R-phrases mentioned in Section 3

R22 Harmful if swallowed.

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

R65 Harmful: may cause lung damage if swallowed.

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.

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