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



SCORPIO

Version 4 / GB 10200007798

1/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

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

1.1 Product identifier	
Trade name	SCORPIO
Product code (UVP)	05584493
1.2 Relevant identified uses of	of the substance or mixture and uses advised against
Use	Fungicide
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.	0800-220876 (UK 24 hr)
	+44(0)1635-563000 (Overseas 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.

Skin sensitisation: Category 1

H317 May cause an allergic skin reaction.

Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

R43 N Dangerous for the environment, R50/53

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:

• Trifloxystrobin

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



SCORPIO

Version 4 / GB 10200007798

2/10 Revision Date: 15.01.2015 Print Date: 06.02.2015



Signal word: Warning

Hazard statements

H317	May cause an allergic skin reaction.
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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
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

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Water dispersible granules (WG) Trifloxystrobin 50 %

Hazardous components

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

Name	CAS-No. /	Classification		Conc. [%]
	EC-No.	EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Trifloxystrobin	141517-21-7	R43 N; R50/53	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	50.00
Dibutyl naphthalenesulfoni c acid, sodium salt	25417-20-3 246-960-6	Xn; R20/22 Xi; R36/38 R52/53	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	> 1.00 - < 25.00
Diatomaceaous earth	61790-53-2 612-383-7	Not classified	Not classified	> 1.00

Further information

	Trifloxystrobin	141517-21-7	M-Factor: 100 (acute)
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For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.



Version 4 / GB 10200007798 **3/10** Revision Date: 15.01.2015 Print Date: 06.02.2015

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures		
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.	
Skin contact	Wash off immediately with plenty of water. If symptoms persist, call a physician.	
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.	
Ingestion	DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Keep patient warm and at rest.	
4.2 Most important symptoms and effects, both acute and delayed		
Symptoms	Local:	
11	Slight irritation, Sensitisation	
	Systemic:	
	Diarrhoea, Vomiting, Nausea	
4.3 Indication of any immediate medical attention and special treatment needed		
Treatment	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.	

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media	
Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet
5.2 Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
5.3 Advice for firefighters	
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	Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.



Version 4 / GB 10200007798

4/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions	Avoid dust formation. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.
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	Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean floors and contaminated objects with plenty of water.
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

	5	
Advice on safe handling	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Avoid dust formation. Ensure adequate ventilation.	
Advice on protection against fire and explosion	Keep away from heat and sources of ignition.	
Hygiene measures	When using, do not eat, drink or smoke. Wash hands immediately after work, if necessary take a shower.	
7.2 Conditions for safe storage, including any incompatibilities		
Requirements for storage areas and containers	Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.	
Advice on common storage	Keep away from food, drink and animal feedingstuffs.	
Suitable materials	Aluminium composite film (min. 0,007 mm Aluminium)	
7.3 Specific end uses	Refer to the label and/or leaflet.	

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Trifloxystrobin	141517-21-7	2.7 mg/m3 (TWA)		OES BCS*
Diatomaceaous earth	61790-53-2	1.2 mg/m3	2007	EH40 WEL



Version 4 / GB 10200007798

(Respirable dust.)		(TWA)		
Diatomaceaous earth	61790-53-2	1.2 mg/m3	12 2011	EH40 WEL
(Respirable dust.)		(TWA)		

*OES BCS: Internal Bayer CropScience "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	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 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).
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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	water-dispersible granules
Colour	light brown
Odour	weak, characteristic
рН	8.5 - 10.5 at 1 % (23 °C) (deionized water)
Water solubility	dispersible
Partition coefficient: n- octanol/water	Trifloxystrobin: log Pow: 4.5 at 25 °C
Impact Sensitivity	Not impact sensitive.
9.2 Other information	Further safety related physical-chemical data are not known.



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SCORPIO

Version 4 / GB 10200007798

6/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

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.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (rat) > 2,000 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	During intended and foregoen applications, no requirely acrossly
	During intended and foreseen applications, no respirable aerosol i formed.
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg Test conducted with a similar formulation.
Skin irritation	Slight irritant effect - does not require labelling. (rabbit) Test conducted with a similar formulation.
Eye irritation	Slight irritant effect - does not require labelling. (rabbit) Test conducted with a similar formulation.
Sensitisation	Sensitising (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test Test conducted with a similar formulation. Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

Assessment repeated dose toxicity

Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Trifloxystrobin 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 Trifloxystrobin is related to parental



Version 4 / GB 10200007798

7/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

toxicity.

Assessment developmental toxicity

SECTION 12: ECOLOGICAL INFORMATION

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

12.1 Toxicity		
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.036 mg/l Exposure time: 96 h	
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.01 mg/l Exposure time: 48 h	
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata) 0.15 mg/l Growth rate; Exposure time: 72 h	
12.2 Persistence and degradability		
Biodegradability	Trifloxystrobin: not rapidly biodegradable	
Кос	Trifloxystrobin: Koc: 2377	
12.3 Bioaccumulative potential		
Bioaccumulation	Trifloxystrobin: Bioconcentration factor (BCF) 431 Does not bioaccumulate.	
12.4 Mobility in soil		
Mobility in soil	Trifloxystrobin: Slightly mobile in soils	
12.5 Results of PBT and vPvB assessment		
PBT and vPvB assessment	Trifloxystrobin: 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	Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling.



Version 4 / GB 10200007798

8/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

	Dispose of empty and cleaned packaging safely. Large containers (> 25 I or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier. 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.
	(TRIFLOXYSTROBIN)
14.3 Transport hazard class(es)	9
14.4 Packing group	
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
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

14.1 UN number14.2 Proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.5 Marine pollutant	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN) 9 III YES
ΙΑΤΑ	
14.1 UN number 14.2 Proper shipping name	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
	N.O.S.
	(TRIFLOXYSTROBIN)
14.3 Transport hazard class(es) 14.4 Packing group	9 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. (TRIFLOXYSTROBIN)
14.3 Transport hazard class(es)	9
14.4 Packing group	
14.5 Environm. Hazardous Mark Emergency action code	YES 2Z

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.



Version 4 / GB 10200007798

9/10 Revision Date: 15.01.2015 Print Date: 06.02.2015

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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 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: III (Slightly hazardous)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R20/22	Harmful by inhalation and if swallowed.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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



SCORPIO

Version 4 / GB 10200007798 **10/10** Revision Date: 15.01.2015 Print Date: 06.02.2015

Text of the hazard statements mentioned in Section 3

H302 I	Harmful if swallowed.
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- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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.

Reason for Revision:

Section 12. Ecological information. Safety Data Sheet according to Regulation (EU) No. 453/2010.

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