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



SENCOREX WG

Version 3/GB 10200006514 1/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

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

1.1 Product identifier

Trade nameSENCOREX WGProduct code (UVP)00929646

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

1.3 Details of the supplier of the safety data sheet

Supplier Bayer CropScience Limited 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

1.4 Emergency telephone no.

Emergency telephone no. 0800

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

Xn Harmful, R22 N Dangerous for the environment, R50/53

2.2 Label elements

Labelling in accordance with the EU Directive on dangerous preparations 1999/45/EC, as amended.

Labelling according to EC Directives

Hazardous components which must be listed on the label:

Metribuzin

Symbol(s)

Xn	Harmful
N	Dangerous for the environment
R-phrase(s) R22 R50/53	Harmful if swallowed. Very 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.

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



SENCOREX WG

Version 3 / GB 10200006514 2/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

S-phrase(s)

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

2.3 Other hazards

Dust may form explosive mixture in air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Water dispersible granules (WG) Metribuzin 700g/kg

Hazardous components

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

Name CAS-No. / EC-No.	Classification	Classification		
	EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	[%]	
Metribuzin	21087-64-9 244-209-7	Xn; R22 N; R50/53	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	70.00
Alkylaryl sulfonate	91078-64-7 293-346-9	Xn; R20/22 Xi; R36/38 R52/53	Acute Tox. 4, H302, H332 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Chronic 3, H412	> 1.00 - < 25.00
Methylene-linked condensation product of arylsulphonic, sodium salts	90387-57-8 291-331-1	R52/53	Aquatic Chronic 3, H412	> 1.00 - < 25.00
Silica, amorphe	7631-86-9 231-545-4	Not classified	Not classified	> 1.00

Further information

Metribuzin	21087-64-9	M-Factor: 10 (acute)
		· · · · · · · · · · · · · · · · · · ·

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

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



SENCOREX WG

Version 3/GB 10200006514 **3/10** Revision Date: 11.10.2012 Print Date: 28.03.2013

General advice

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

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. Get medical attention if irritation develops and persists.

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

Call a physician or poison control center immediately. 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.)

4.2 Most important symptoms and effects, both acute and delayed

No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment

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 antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

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

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.



SENCOREX WG

Version 3 / GB 10200006514 4/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

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

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

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

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

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

Dust may form explosive mixture in air. Keep away from heat and sources of ignition.

Hygiene measures

Avoid contact with skin, eyes and clothing. Keep working clothes 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.

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



SENCOREX WG

Version 3 / GB 10200006514 5/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

Keep away from direct sunlight.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

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
Metribuzin	21087-64-9	0.56 mg/m3 (TWA)		OES BCS*
Silica, amorphe (Respirable dust.)	7631-86-9	2.4 mg/m3 (TWA)	12 2011	EH40 WEL
Silica, amorphe (Inhalable dust.)	7631-86-9	6 mg/m3 (TWA)	12 2011	EH40 WEL

*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	If product is handled while not enclosed, and if contact may occur: Wear respirator with a particle filter mask (protection factor 10) conforming to European Norm EN149FFP2 or EN140P2 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. 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



SENCOREX WG

Version 3/GB 10200006514

6/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

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	water-dispersible granules	
Colour	white to light yellow	
Odour	characteristic	
рН	5.0 - 7.0 at 1 % (23 °C) (deionized water)	
Dust explosion class	capable of causing a dust explosion (modified Hartmann tube)	
Bulk density	529 - 621 kg/m3	
Water solubility	dispersible	
Impact Sensitivity	not impact-sensitive	
Combustion number	CN5 Complete combustion with flames at 20 °C	
9.2 Other information		

Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition > 100 °C

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.
- **10.4 Conditions to avoid** Extremes of temperature and direct sunlight.
- **10.5 Incompatible materials** Bases Store only in the original container.
- 10.6 Hazardous decomposition products



SENCOREX WG

Version 3/GB 10200006514 7/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (rat) 1,449 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	LC50 (rat) > 4.84 mg/l Exposure time: 4 h Determined in the form of dust. Highest attainable concentration. Test conducted with a similar formulation.
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg Test conducted with a similar formulation.
Skin irritation	No skin irritation (rabbit)
Eye irritation	Slight irritant effect - does not require labelling. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

Assessment repeated dose toxicity

Metribuzin caused specific target organ toxicity in experimental animal studies in dogs in the following organ(s): blood. Metribuzin caused haemolytic anaemia in animal studies. The observed effects do not appear to be relevant for humans.

Assessment Mutagenicity

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

Assessment Carcinogenicity

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

Assessment Toxicity to Reproduction

Metribuzin 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 Metribuzin is related to parental toxicity.

Assessment developmental toxicity

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

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity



SENCOREY MC

SENCOREX WG Version 3 / GB 102000006514	8/10 Revision Date: 11.10.2012 Print Date: 28.03.2013
Toxicity to fish	LC50 (Rainbow trout (Oncorhynchus mykiss)) 64 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) 49.6 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metribuzin.
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata) 0.066 mg/l Exposure time: 72 h
12.2 Persistence and degrad Biodegradability	ability Not applicable for this mixture.
12.3 Bioaccumulative potenti	ial
Bioaccumulation	Not applicable for this mixture.
12.4 Mobility in soil Mobility in soil	Not applicable for this mixture.
12.5 Results of PBT and vPvl Not relevant as no chemical sa	
12.6 Other adverse effects Additional ecological informatic No other effects to be me	

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.

Dispose of empty and cleaned packaging safely.

Large containers (> 25 l 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.

Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

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



SENCOREX WG

Version 3/GB 10200006514

9/10 Revision Date: 11.10.2012 Print Date: 28.03.2013

ADR/RID/ADN

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

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 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

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



SENCOREX WG

Version 3 / GB 10200006514 **10/10** Revision Date: 11.10.2012 Print Date: 28.03.2013

Further information WHO-classification: II (Moderately 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

R20/22	Harmful by inhalation and if swallowed.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
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.

Text of the hazard statements mentioned in Section 3

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- 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:

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.