

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MONITOR



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

MONITOR

Sulfosulfuron, 800 g/kg water dispersible granule

GIFAP Code : WG

EC number: not applicable

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

Herbicide (agricultural use)

Not for public use

1.3. Details of the supplier of the safety data sheet

INTERFARM (UK) LIMITED

36 Newgate Street

Doddington

Cambridgeshire PE15 0SR

United Kingdom

Tel.: +44 (0)1354 741414

email: technical@interfarm.co.uk

1.4. Emergency Telephone number 24/24hrs

UK & Ireland; +44 (0)333 333 9962

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classified as hazardous according to regulation (EC) No 1272/2008 (CLP)

Signal word(s)

Warning

Pictogram (s)



Aquatic Acute Cat 1
Aquatic Chronic Cat 1

Hazard statement(s)

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

2.2. Label elements

Signal word(s)

Warning

Pictogram



(s)

Hazard statement(s)

H410: Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P391: Collect spillage

P501 (UK/IE): Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste

EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

Special risks and safety precautions (Commission Regulation (EU) 547/2011):

General provisions

SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).

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Specific safety precautions

SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of (*as indicated on the label*) to surface water bodies.

2.3. Other hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. This product is to be considered as a mixture in conformance to EU Regulations.

Composition/Information on hazardous ingredients

Number	% w/w	CAS number	Chemical name
1	80	141776-32-1	1-(4,6-dimethoxypyrimidin-2-yl)-3-(2-ethylsulfonylimidazo[1,2-a]pyridine-3-ylsulfonyl)urea
2	>1 - <3	73665-22-2	C6-10 Alkyl ether sulfate, sodium salt

Number	EC number	Annex-1 listing	Regl 1272/2008 Pict.	Hazard statements
1	/	yes	GHS09	H400, H410
2	/	NA	GHS05	H315, H318

Other information

Code ID: MON37504

4. FIRST AID MEASURES

4.1. Description of first aid measures

General	In all cases of doubt, seek medical attention.
Inhalation	Move to fresh air. If symptoms persist, seek medical advice.
Skin	Remove contaminated clothing. Wash immediately with water.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion	Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing media	Dry chemical powder, carbon dioxide, foam, sand water
Unsuitable extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture

May emit toxic gases under fire conditions (carbon monoxide (CO), ammonia (NH₃), nitrogen oxides (NO_x), sulphur oxides (SO_x) and hydrogen cyanide (HCN)).

5.3. Advice for fire-fighters

Wear self contained breathing apparatus. Wear suitable protective clothing and eye/face protection.

Other information

Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

Do not breathe dust. Wear protective gloves, safety goggles or face shield, and suitable protective clothing.
Remove all ignition sources.
Evacuate the danger area.

For emergency responders

Do not breathe dust. Wear protective gloves (nitrile), safety goggles or face shield, and suitable protective clothing.
Remove all ignition sources.
Evacuate the danger area or consult an expert.

6.2. Environmental precautions

Do not allow escape into sewage system or watercourses. Do not wash residues into drains or other waterways.

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6.3. Methods and material for containment and cleaning up

Containment of a spill	Do not allow escape into sewage system or watercourses.
Clean-up procedures	Clean up spills immediately. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

6.4. Reference to other sections For personal protection; see section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling	The usual precautions for handling chemicals should be observed. For personal protection see section 8.
Fire and explosion prevention	Avoid dust formation, since dust can form an explosive mixture with air. Isolate from potential sources of ignition, including electrostatic discharge.

7.2. Conditions for safe storage, including any incompatibilities

Storage requirements	Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from heat. Keep away from food, drink and animal feedingstuffs. Do not drink, eat and smoke in work areas.
Other information	Do not mix with water (except for the normal preparation).

7.3. Specific end use(s) See label on the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters There is no national or European exposure limit for this product. No chemical safety report is required for this kind of product.

8.2. Exposure controls

Appropriate Engineering controls	Provide adequate ventilation.
Individual protection measures	
Respiratory	In case of dust formation, use dust mask.
Hand	Wear protective gloves of nitrile
Eye	Wear safety goggles or face shield.
Skin and body	Wear suitable protective clothing.
Other information	Launder clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Name *Sulfosulfuron, 800 g/kg water dispersible granule*

9.1 Information on basic physical and chemical properties

Appearance	granules (Visual assessment)
Dust content	"nearly dust free" (0.3 mg dust/30 g product, CIPAC MT 171) Attrition resistance = 99.5% (CIPAC MT 171)
Colour	ivory cream (visual assessment)
Odour	chemical odour (olfactory assessment)
Odour threshold	not determined
pH value	5.46 (1% suspension, 21°C) (CIPAC MT 75.2)
Melting point/freezing point	not determined
Initial boiling point & boiling range	not applicable
Flash point	not applicable
Evaporation rate	not applicable
Flammability	not "highly flammable" (EEC A.10)
Upper/lower flammability or explosive limits	not determined
Vapour pressure	not determined
Vapour density	not applicable
Relative density	not applicable
Bulk density	Loose : 0.489 g/ml Tap : 0.522 g/ml (CIPAC MT 186)
Solubility in water	dispersible in water ,

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(solubility of sulfosulfuron : 18 mg/l (pH 5), 1627 mg/l (pH 7), 482 mg/l (pH 9);
20°C, OECD 105)

Solubility in other solvents	not applicable
Partition coefficient n-octanol/water	not determined (sulfosulfuron: log Pow 0.73 (pH 5) to 1.44 (pH 9) (25°C, OECD 107)
Autoignition temperature	not auto flammable up to 400°C (EEC A.16)
Decomposition temperature	not determined
Dynamic viscosity	not applicable
Kinematic viscosity	not applicable
Explosive properties	not explosive (EEC A.14)
Oxidising properties	not oxidising (expert judgement)

9.2. Other information

Relative vapour density (air = 1)	not applicable
Surface tension	not applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity	Stable under recommended storage and handling conditions (see also section 7).
10.2. Chemical stability	Stable for a minimum of 2 years under recommended storage and handling conditions (see section 7).
10.3. Possibility of hazardous reactions	None known
10.4. Conditions to avoid	Avoid high temperature, light, humidity
10.5. Incompatible materials	Strong oxidising agents, alkaline materials.
10.6. Hazardous decomposition products	May emit toxic gases under fire conditions (carbon monoxide (CO), ammonia (NH ₃), nitrogen oxides (NO _x), sulphur oxides (SO _x) and hydrogen cyanide (HCN)).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Name	<i>Sulfosulfuron, 800 g/kg water dispersible granule (Code ID : MON37588)</i>
Acute toxicity	
Oral	LD50 rat: >5000 mg/kg (EPA FIFRA 81-1)
Dermal	LD50 rat: >5000 mg/kg (EPA FIFRA 81-2)
Inhalation	LC50 rat (4 hours): > 3.2 mg/l (nose only; maximum feasible concentration) (EPA FIFRA 81-3)
Irritation	
Skin	weakly irritating (EPA FIFRA 81-5)
Eye	weakly irritating (EPA FIFRA 81-4)
Sensitization	not sensitizing (Maximisation test) (EPA FIFRA 81-6)

The following data are applicable to ingredient(s) listed below:

Name	<i>Active substance Sulfosulfuron, technical grade:</i>
Other toxicological information:	- Acute neurotoxicity : NOAEL = 2000 mg/kg bw/day (US EPA 81-8) - Genotoxicity: negative in all tests (EPA 84-2, Ames test) - Multigeneration reproduction study (rat): negative (OECD 416). - Teratogenicity: negative (EPA FIFRA 83-3). - Carcinogenicity (rats, mice): negative. (EPA FIFRA 83-5, 83-2) - 90d-neurotoxicity: NOAEL = 1211 mg/kg bw/day (US EPA 81-8)

Based on the available data, no classification criteria are met for any of these hazard classes.

Information on likely routes of exposure

This product is for agricultural use; therefore the most probable routes of exposure are via skin or inhalation.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

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Name	Sulfosulfuron, 800 g/kg water dispersible granule
Daphnia	Acute toxicity, 48h-EC50 (<i>Daphnia magna</i>): > 117 mg a.s/l ; >146 mg formulation/l (OECD 202)
Algae	Acute toxicity, (<i>Selenastrum capricornutum</i>): 72h-EC ₅₀ = 225 µg a.s/l ; 282 µg formulation/l 72h-EC _{b50} = 57 µg a.s/l ; 71.4 µg formulation/l 72h-NOEC _r = 18 µg a.s/l ; 22.6 µg formulation/l 72h-NOEC _b : <18 µg a.s/l ; <22.6 µg formulation/l (EC C.3)
Aquatic plant	Acute toxicity, 7d (<i>Lemna gibba</i>): 7d-E _r C50: >1.7 µg a.s/l ; > 2.1 µg formulation/l 7d-E _b C50 = 0.88 µg a.s/l ; 1.1 µg formulation/l 7d-NOEC _{r&b} = 0.22 µg a.s/l ; 0.27 µg formulation/l OECD 221
Bees	Acute oral toxicity, 48h-LD50 (<i>Apis mellifera</i>): > 104 µg a.s/bee (OECD 213) Acute contact toxicity, 48h-LD50 (<i>Apis mellifera</i>): > 100 µg a.s/bee (OECD 214)
Earthworm	Chronic toxicity, 56d-NOEC (<i>Eisenia foetida</i>): 100 mg a.s/kg soil dw (OECD 222)
Soil micro organisms	No significant impact on carbon mineralization or nitrogen transformation at up to 0.133 mg a.s/kg dry soil (OECD 216, 217)

The following data are applicable to a close formulation:

Name	Sulfosulfuron, 750 g/kg water dispersible granule (Code ID: MON37532)
Fish	Acute toxicity, 96h-LC50 (<i>Oncorhynchus mykiss</i>): > 97 mg formulation/l (OECD 203)

The following data are applicable to ingredient(s) listed below:

Name	Active substance Sulfosulfuron, technical grade
Fish	Chronic toxicity, fish early life stage, 87d (<i>Oncorhynchus mykiss</i>): NOEC = 100 mg/l (FIFRA 72-4)
Daphnia	Chronic toxicity, 21d-NOEC (<i>Daphnia magna</i>): 102 mg/l (OECD 202)
Birds	Acute toxicity, single dose oral LD50 (FIFRA 71-1) Bobwhite quail: > 2250 mg/kg Mallard duck: > 2250 mg/kg
Earthworm	Acute toxicity, 14d-LC50 (<i>Eisenia foetida</i>): > 848 mg/kg soil dw (OECD 207)

12.2. Persistence and degradability

The following data are applicable to ingredient(s) listed below:

Name	Active substance Sulfosulfuron, technical grade
Degradation Biotic	considered as not readily biodegradable
Degradation Abiotic	Hydrolysis (OECD 111) DT50 at pH 4 = 7 days (25°C) DT50 at pH 5, 7, 9: stable (25°C)

12.3. Bioaccumulative potential

The following data are applicable to ingredient(s) listed below:

Name	Active substance Sulfosulfuron, technical grade
Bioaccumulation	Partition coefficient n-octanol/water log Pow = 0.73 (pH 5) to 1.44 (pH 9) (25°C, OECD 107)
Bio Concentration Factor (BCF):	not required (log Pow < 3)

12.4. Mobility in soil

The following data are applicable to ingredient(s) listed below:

Name	Active substance Sulfosulfuron, technical grade
	Adsorption K _{Foc} values: 5.3 - 89 ml/g (mean 33.2); 5 soils, 25°C Desorption K _{Foc-des} -values :66-630 ml/g (mean 399) Therefore the substance has high to very high mobility (OECD 106).

12.5. Results of PBT and vPvB assessment

Not required (no chemical safety report required).

12.6. Other adverse effects

No other known adverse effects on the environment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Substance and/or Mixture	According to local regulations. For further advice contact manufacturer.
Contaminated packaging	According to local regulations.

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14. TRANSPORT INFORMATION

Land transport ADR/RID, Sea transport IMO/IMDG, Air transport ICAO-TI/IATA-DGR:

14.1. UN Number	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfosulfuron)
14.3. Transport hazard class(es)	Land transport ADR/RID class: 9 label: 9 IMO/IMDG code class: 9 Air transport ICAO-TI/IATA-DGR class: 9
14.4. Packing group	III
14.5. Environmental hazards	Marine pollutant: yes
14.6. Special precautions for user	EMS: F-A, S-F No other special precaution required.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code	Not applicable

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

There is no specific regulation/legislation for this mixture.

15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

16. OTHER INFORMATION

Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the purpose of classification:

Classification based on tests, on a close formulation and the properties of the active substance.

Changes made to the previous version: No previous version. [Based on SUL80WGCLP/EU/000gb from SCAE]

Full text of hazard statement(s) used in this document:

- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

This information only concerns the above mentioned product for the specific use mentioned and is not valid for such product used in combination with any other product. The information is to our best knowledge correct and complete and is given in good faith as of the date indicated. It is the user's responsibility to use this information as appropriate for his own particular use of this product.