

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 of 18 December 2006 (REACH)

SUMIMAX DIGITAL GUILLOTINE (FLUMIOXAZIN 30 SC) Ref. S5348230SC/pEU/100gb

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

Product label name Flumioxazin, 30% suspension concentrate **SUMIMAX DIGITAL GUILLOTINE**
GIFAP code: SC
Use Herbicide (agricultural use)
Supplier SUMITOMO CHEMICAL AGRO EUROPE S.A.S.
Parc d'Affaires de Crécy
2, Rue Claude Chappe
69370 Saint-Didier-au-Mont-d'Or
France
Tel.: +33 478 64 32 60

2. HAZARD IDENTIFICATION

Chemical description *Flumioxazin, 30% suspension concentrate*
GIFAP code: SC

Classified as hazardous according to EU directives 1999/45/EC, 2001/60/EC and 2006/8/EC:
Classification based on Tests



Symbol(s) TOXIC (T) DANGEROUS FOR THE ENVIRONMENT (N)
R(isk) phrase(s) R61: May cause harm to the unborn child
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S(afety) phrase(s) S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S49: Keep only in the original container.
S53: Avoid exposure – obtain special instructions before use.
S35 : This material and its container must be disposed of in a safe way.
S57 : Use appropriate container to avoid environmental contamination

Special risks and safety precautions (directive 91/414/EEC):

General provisions SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).
Specific safety precautions SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of (as indicated on the label) to surface water bodies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a preparation in conformance to EC directives.

Information on ingredients:

Chemical description Flumioxazin, 30% suspension concentrate

Composition/Information on hazardous ingredients

| Number | % w/v | CAS number | Chemical name | |
|--------|-----------|----------------|--|----------------|
| 1 | 30 | 103361-09-7 | N-(7-fluoro-3,4-dihydro-3-oxo-4-prop-2-ynyl-2H-1,4-benzoxazin-6-yl) cyclohex-1-ene-1,2-dicarboximide | |
| Number | EC number | Annex-1 number | Symbol(s) | Risk phrase(s) |
| 1 | NA | 613-166-00-X | T, N | R61, R50/53 |

Other information SCAE code : SCAE0603

4. FIRST AID MEASURES

Symptoms and effects May cause harm to the unborn child.
First aid
General In cases of doubt, seek medical attention.
Inhalation Move to fresh air. If symptoms persist, seek medical advice.
Skin Remove contaminated clothing. Wash immediately with soap and 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. Always seek medical attention.
Advice to physician No specific recommendations.

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5. FIRE-FIGHTING MEASURES

| | |
|--|---|
| Extinguishing media | Dry chemical powder, carbon dioxide, foam, sand, water. |
| Unsuitable extinguishing media | none known. |
| Special exposure hazards | May emit toxic and irritating fumes under fire conditions. |
| Hazardous decomposition/combustion products | None known. |
| Protective equipment | 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

| | |
|----------------------------------|---|
| Personal precautions | For personal protection see section 8. |
| Environmental precautions | Do not allow to escape into sewage system or water courses. |
| Methods for cleaning up | In case of spills (liquid), soak it up immediately with suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and dispose as waste following local regulations. Do not wash residues into drains or other waterways. |

7. HANDLING AND STORAGE

| | |
|--------------------------------------|---|
| Handling | The usual precautions for handling chemicals should be observed. For personal protection see section 8. |
| Fire and explosion prevention | No specific recommendations. |
| Storage requirements | Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from heat. |
| Other information | Do not mix with water (except for the normal preparation). |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | |
|-----------------------------|--|
| Engineering controls | Provide adequate ventilation. |
| Exposure limits | No exposure limits have been established for this material. |
| Personal protection | |
| Respiratory | The usual precautions for handling chemicals should be observed. |
| Hand | Wear protective rubber gloves |
| 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

| | |
|--|---|
| Appearance | liquid |
| Colour | white |
| Odour | faint chemical odour |
| Boiling point/range | not determined |
| Melting point/range | not applicable |
| Flash point | > 79°C (closed cup) |
| Flammability | not expected from the components |
| Autoignition temperature | > 600°C |
| Explosive properties | not expected from the components |
| Explosion limits | not applicable |
| Oxidising properties | not expected from the components |
| Vapour pressure | not determined |
| Density | 1.10 g/ml (20°C) |
| Bulk density | not applicable |
| Solubility in water | dispersible in water (solubility of flumioxazin = 1.79 mg/l at 25°C) |
| Solubility in other solvents | not applicable |
| pH value | 7.72 (1% suspension in water) |
| Partition coefficient n-octanol/water | not determined (flumioxazin: log Pow = 2.55 ; 20°C) |
| Relative vapour density (air = 1) | not applicable |
| Dynamic Viscosity | 1197 to 57 mPa.s (shear rate: 2.52 to 158.8 s ⁻¹) at 20°C |
| Surface Tension | 30.9 mN/m (25°C) |

10. STABILITY AND REACTIVITY

| | |
|---|---|
| Stability | Stable under recommended storage and handling conditions (see section 7). |
| Conditions to avoid | Avoid high temperatures. |
| Materials to avoid | Strong oxidising agents, alkaline materials. |
| Hazardous decomposition products | None known. |

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11. TOXICOLOGICAL INFORMATION

No experimental toxicological data are available on the preparation as such. The following data are applicable to a close formulation or ingredient(s) listed below :

| | |
|--|--|
| Name | Flumioxazin, 42% suspension concentrate |
| Acute toxicity | |
| Oral LD50 | rat: > 5000 mg/kg |
| Dermal LD50 | rat: > 5000 mg/kg |
| Inhalation LC50 | rat (4 hours): > 2.11 mg/l (nose only; maximum feasible concentration) |
| Irritation | |
| Skin | weakly irritating |
| Eye | weakly irritating |
| Sensitization | not sensitizing (Buehler method) |
| Other toxicological information | Active substance (Flumioxazin, technical grade): -Genotoxicity: negative in all tests. -Reproduction: no effect up to 7.5 mg/kg/day, impairment of the reproductive capacity at about 16 mg/kg/day and above. -Teratogenicity: negative in rabbits, teratogenic effect in rats at 30 mg/kg/day (oral route) and 300 mg/kg/day (dermal route). -Carcinogenicity: negative. |

12. ECOLOGICAL INFORMATION

No experimental ecotoxicological data are available on the preparation as such. The following data are applicable to the formulation or ingredient(s) listed below :

| | |
|------------------------------|--|
| Name | Flumioxazin, technical grade |
| Ecotoxicity | |
| Fish | Acute toxicity, 96h-LC50 (<i>Oncorhynchus mykiss</i>): 2.3 mg/l Acute toxicity, 96h-LC50 (<i>Lepomis macrochirus</i>): > 21 mg/l |
| Daphnia | Acute toxicity, 48h-EC50 (<i>Daphnia magna</i>): 5.9 mg/l |
| Algae | Acute toxicity, 72h-EC50 (<i>Selenastrum capricornutum</i>): 0.85 µg/l |
| Aquatic plant | Acute toxicity, 14d-EC50 (<i>Lemna gibba</i>): 0.35 µg/l. |
| | <i>Remark: modified studies were carried out on the 50WP formulation to evaluate reversibility of the effects:</i> |
| | Algae Acute toxicity, 72h-EC ₅₀ (<i>Selenastrum capricornutum</i> , prolonged study): 0.78 µg a.s./l ; recovery of growth within 72 hours. 72h-EC ₅₀ (<i>Navicula pelliculosa</i> , prolonged study): 1.5 µg a.s./l ; recovery of growth within 48 hours. |
| | Aquatic plant Acute toxicity, 14d-EC ₅₀ (<i>Lemna gibba</i> , study with sediment): 2.3 µg a.s./l ; recovery of frond density within 2 - 5 days. |
| Bees | Acute oral toxicity, 48h-LD50 (<i>Apis mellifera</i>): > 100 µg/bee. Acute contact toxicity, 48h-LD50 (<i>Apis mellifera</i>): > 105 µg/bee. |
| Birds | Acute toxicity, single dose acute oral LD50, Bobwhite quail: > 2250 mg/kg b.w. Mallard duck: > 2250 mg/kg b.w. |
| Earthworm | Acute toxicity, 14d-LC50: > 982 mg/kg soil |
| Fate | |
| Degradation Abiotic | DT50 at pH 5 = 3-5 days (25°C) DT50 at pH 7 = 19-26 hours (25°C) DT50 at pH 9 = 14-23 mn (25°C) |
| Degradation Biotic | Not determined |
| Adsorption/desorption | Does not leach to ground water. |
| Water/sediment system | DT50 whole system: < 1.9 day (rapid adsorption and degradation on sediments) |
| Bioaccumulation | Partition coefficient n-octanol/water Log Pow = 2.55 at 20°C |

13. DISPOSAL CONSIDERATIONS

| | |
|-------------------------------|---|
| Product | 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 class

| | | | |
|----------------------------------|---|-------------------------------------|------|
| ADR/RID class | 9 | Packing group | III |
| Label(s) | 9 | Substance Identification no. | 3082 |
| Hazard Identification no. | 90 | UN number | 3082 |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 30% flumioxazin) | | |

Sea transport: IMO/IMDG code

| | | | |
|-----------------------------|---|----------------------|------|
| Class | 9 | UN number | 3082 |
| Marine pollutant | no | Packing group | III |
| EMS | F-A, S-F | | |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 30% flumioxazin) | | |

Air transport: ICAO-TI/IATA-DGR

| | | | |
|-----------------------------|---|----------------------|------|
| Class | 9 | UN number | 3082 |
| | | Packing group | III |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: 30% flumioxazin) | | |

15. REGULATORY INFORMATION

See hazard identification in section 2.

As appropriate, the classification is based on:

- directive 2001/59/EC (results of the experimental studies),
- directives 1999/45/EC, 2001/60/EC, 2006/8/EC (classification based on the concentration of active substance and ingredients),
- directive 2003/82/EC for pesticides (special risks and safety precautions).

The safety data sheet is written according to Regulation (EC) No 1907/2006 of 18 December 2006 (REACH).

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It

remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Full text of risk phrase(s) used in this document:

R61: May cause harm to the unborn child

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

History

| | |
|---------------------------------|--|
| Date of previous version | 17 January 2007 (revision 0.00) |
| Date of revision | 1 st June 2007 |
| Revision | 1.00 |
| Composed by | O. Mercier (email: odile.mercier@sumitomo-chem.fr) |

Changes were made in sections nos 2, 3, 14, 15, 16, according to changes in the regulations.