# with us you are growing goodness



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**REG NO:** 2000/010819/07 **VAT NO:** 4120189206

## **Safety Data Sheet**

# **DIFFLAN-** Reg. No: L 8313 (Act No 36 of 1947)

Date of issue: 27/09/2010 Date revised: 27/06/2019

| 1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER. |   |  |
|--|---|--|
| Product name:  | DIFFLAN   |  |
| Other means of identification:                                     | Diflufenican 500g/L SC  |  |
| UN number:   | 3082  |  |
| Recommended use:   | Herbicide   |  |
| Restrictions on use:   | Agriculture   |  |
|  | MERIDIAN AGRITECH   |  |
|  | P O BOX 436   |  |
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|  | www.agritech.co.za  |  |
|  | POISON CENTRE (UNITAS HOSPITAL):  |  |
|  | 012 664 1100  |  |
| Emergency Number:  | WESTERN CAPE POISONS TELEPHONE SERVICE: 0861 555 777                      |  |
| - ,  | RAPID SPILL RESPONSE:   |  |
|  | 0800 775 3305   |  |
|  | GRIFFON POISON CENTRE: 082 446 8946                                       |  |
| Chemical Name:   | '2,4'-difluoro-2-(α,α,α-trifluoro-m-tolyloxy) nicotinanilide              |  |
| 2) Classification of the substance / mixture:                      |   |  |
|  | Acute Aquatic Tox,1: H400   |  |
| Classification of the product:                                     | Chronic Aquatic Tox,1:H410  |  |
|  | Full text of R-phrases; see section 15.                                   |  |
|  | Hazard statement:   |  |
| Label elements:  | H410: Very toxic to the aquatic life with long lasting effects            |  |
|  | Precautionary statements:   |  |
|  | P410: Keep out of reach of children                                       |  |
|  | P501: Dispose of contents/ Container to an approved waste disposal plant. |  |
|  | <b>₹</b>  |  |

|                            | Signal Word: WARNING                     |
|----------------------------|--|
| Health effects: eyes:      | May cause severe irritation.             |
| Health effects: skin:      | May cause irritation and may be harmful. |
| Health effects: ingestion  | May cause irritation and may be harmful. |
| Health effects: inhalation | May cause irritation and may be harmful. |
| Health effects: Other      |  |

#### 3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

| Composition | CAS No.    | EC No. | Classification<br>according to<br>Regulation EC<br>1272/2008 (CLP) | Classification according to 67/548/EEC   |
|-------------|------------|--------|--|--|
| 50 %        | 83164-33-4 |        | Acute Aquatic Tox,1:<br>H400                                       |  |
|             |            |        | Chronic Aquatic<br>Tox,1:H410                                      |  |
|             | •          |        |  | Composition  CAS No.  EC No.  according to Regulation EC 1272/2008 (CLP)  Acute Aquatic Tox,1: H400  Chronic Aquatic |

Full text of R- and S-phrases: see section 15.

| 4) FII St Alu Weasules. | 4) | First | Aid | Measures: |
|-------------------------|----|-------|-----|-----------|
|-------------------------|----|-------|-----|-----------|

Eye contact: Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Obtain medical attention if irritation persists. Skin contact: Thoroughly wash body with large amounts of water and soap. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical assistance should irritation persist. Wash contaminated clothing before re-use Ingestion: Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. One or two glasses of water may be given. For advice, contact the National Poisons Centre. Seek medical assistance immediately. Inhalation: Remove patient to fresh air. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance.

Most important symptoms and effects, acute and delayed:

Indication of immediate medical attention and special treatment needed: Advice to physician

None known

Treat symptomatically. If swallowed, administer 200 ml liquid paraffin. Administer gastric lavage with at least 4 litres of water, followed by animal charcoal and sodium sulphate. Pulmonary aspiration must be avoided. Derivatives or adrenaline is contra-indicated. Product contains aromatic solvent. Symptomatic treatment and supportive therapy as necessary

### 5) Fire-Fighting Measures:

Suitable extinguishing media:

Water fog, Carbon dioxide or dry chemical, halon or alcohol-resistant foam.

| Unsuitable extinguishing media:                        | Water jet, due to contamination risk.   |
|--|---|
| Special hazards arising from the substance or mixture: | UNUSUAL FIRE OR EXPLOSION HAZARDS:  |
|  | Cool sealed drums with water to prevent rupture due to thermal expansion.   |
| Fire-fighting:   | Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.   |
|  | Fight fire from maximum distance and use unmanned hos holder or monitor nozzles. If area is heavily exposed to fire and if conditions permit, let fire burn itself out. Contain fire control agents for later disposal.   |
|  | Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Avoid pollution of waterways.   |
|  | UNUSUAL FIRE OR EXPLOSION HAZARDS: Fire may produce irritating or poisonous vapours (toxic oxides of nitrogen and corrosive bromine), mists or other products combustion. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids  |
| Protective clothing:                                   | Full protective clothing and self-contained breathing apparatusWhen fighting a major fire wear an air-supplie respirator.   |
| 6) Accidental Release Measures:                        |   |
| Personal precautions:                                  | Do not inhale vapour or spray. Avoid contact with skin and eyes. For personal protection see section 8.   |
| Environmental precautions:                             | Do not contaminate waterways, drains and groundwater. contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.  |
| Cleaning procedure:                                    | Wear protective clothing. Clear area of unprotected personnel. Contain and absorb liquid spills with inert material and place in waste containers. Wash area with   |
|  | water containing soda or detergent and absorb with further inert material. If spill does enter waterways contact the local authority. Heavily contaminated soil layers should be removed and disposed of in an approved way. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical |

| Disposal:   | Waste Disposal:  |
|---|--|
| •   | In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. |
|   | Container Disposal:  |
|   | Refer to the product label for instructions.   |
|   | If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.   |
|   | DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.   |
|   | Do not transport if this container is damaged or leaking.  |
| 7) Handling & Storage:  |  |
| Handling:   | Avoid skin and eye contact and inhalation of spray mist.<br>Keep away from heat and sources of ignition. Ensure<br>adequate ventilation.   |
|   | Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.   |
|   | APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.  |
| Storage:  | Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Store out of direct sunlight and avoid temperatures below - 10 or above 35. Keep away from children and uninformed persons.  |
| 8) Exposure Control / Personal Protection:  |  |
| It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations. |  |
| PERSONAL PROTECTIVE EQUIPMENT:  |  |
| Clothing:   | Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.   |
| Gloves:   | Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance  |
| Eye protection:   | The use of safety goggles with side shields is recommended.  |
| Respiratory protection:   | Wear respirator if ventilation is inadequate or exposure to high levels are likely   |
| Emergency eye wash:   | Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.   |
| 9) Physical & Chemical Properties:  |  |

Form: Liquid
Colour: White

Odour: Miscible (active ingredient is insoluble).

Odour threshold:

No data available

pH:

Melting point / Freezing pointNo data availableInitial boiling point and boiling rangeNot flammableFlash point:No data available

Evaporation rate:

Flammability (solid, gas)

Upper/ lower flammability or explosive limits:

No data available

No data available

Vapour pressure:No data availableVapour density:No data available

Relative density: ±1.170

Solubility(ies)

Partition coefficient: n-octanol/water

Auto-ignition temperature:

Viscosity:

Suspense in water.

No data available

No data available

No data available

#### 10) Stability & Reactivity:

Reactivity:

Chemical stability:

When stored appropriately this product should show no significant degradation for 2 years from the date of

manufacture. Oxidising agents, acids and alkali.

**Hazardous decomposition product(s):**Fire may produce harmful combustion products, such as

carbon monoxide and organic components, which are toxic and irritating. Oxides of carbon and nitrogen, and compounds of fluorine including hydrofluoric acid may be

formed in a fire.

Conditions to avoid:

Protect from high temperatures, open flames, sparks and

sources of ignition.

Incompatible materials: Acids and bases

#### 11) Toxicological Information:

Acute:

Oral LD50 >2 000 mg/kg, rat

Dermal LD50 > 2 000 mg/kg, rats

Inhalation LC50 (4h): > 1.4 mg/L air, rat.

Skin irritation : Not an irritant, rabbit. Eye irritation : Slight irritant, rabbit.

Sensitisation : Animal test did not cause sensitization by skin contact, guinea pig.

Other :

Repeated dose toxicity

.

Mutagenicity: No data available

Carcinogenicity: No data available

Teratogencity: Not teratogenic in animal experiments

#### 12) Ecological Information:

#### Information below based on active ingredient:

Bees: LC50 (oral & contact): > 100 ug/bee. Not toxic to bees.

Birds: LD50: Japenese quail: > 2 000 mg/kg, Mallard ducks > 4000 mg/kg.

**Fish:**. LC50 (96hrs) Rainbow trout: 100 mg/L Carp 100 mg/L. **Algae:** EC50 (72h) Selenastrum capricornutum >1.74 μg/L.

Worms:

Other aquatic species:

Persistence: Half-life time (t1/2): 105-210 days. Low mobility

#### 13) Disposal Considerations:

**Waste Disposal:** In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Refer to the product label for instructions. Triple rinse empty containers before disposal in the following manner: Invert the container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container volume. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Empty containers should not be burnt; puncture and flatten containers and dispose at a licensed landfill site according to local regulations. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Prevent contamination of water sources, food or feed by disposal. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. If recycling, replace cap and take containers to the designated recycling point. If containers cannot be recycled, they should be disposed of together with the waste chemical according to local regulations.

#### 14) Transportation Information:

UN NUMBER: 3082

Road Transport ADR/ RID:

Class: 9

Packaging group: III

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN)

Maritime Transport IMDG / IMO:

Marine Pollutant: Yes

Class: 9

Packaging group: III

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN)

Air Transport ICAO/IATA:

Class: 9

Packing group: III

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN)

## 15) Regulatory Information:

#### Labelling according to EC directives:

Hazardous components which must be listed on the label: DIFLUFENICAN

**Symbols:** Xn – Harmful.

Xi - Irritant

N - Dangerous for the environment

Risk - Phrase (s):

- R 10 Flammable.
- R 20/22 -Harmful by inhalation and if swallowed
- R 37/38 Irritating to eyes, respiratory system and skin.
- R 41 Risk of serious damage to eyes.
- R 43 May cause sensitization by skin contact
- R48 Danger of serious damage to health by prolonged exposure.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Safety - Phrase (s):

- S 2 Keep out of the reach of children.
- S 13 Keep away from food, drink and animal feeding stuffs.
- S 24/25 Avoid contact with skin and eyes.
- S 36/39 Wear suitable protective clothing and eye/face protection.
- S 57 Use appropriate containment to avoid environmental contamination.
- S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- S62 If swallowed, do not induce vomiting: see medical advice immediately and show this container or label.

#### Hazard - Phrase(s))

H410 - Very toxic to the aquatic life with long lasting effects

#### 16.Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

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