


## Safety Data Sheet

### DOXSTAR FLO - Reg. No: L 9884 (Act No 36 of 1947)

Date of issue: 17/03/2016

Date of revision: 27/06/2019

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
<b>Product name:</b>	DOXSTAR FLO
<b>Other means of identification:</b>	Indoxacarb 300 g/L SC
<b>UN number:</b>	3082
<b>Recommended use:</b>	Insecticide
<b>Restrictions on use:</b>	Agriculture
<b>Distributed by:</b>	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 <a href="http://www.agritech.co.za">www.agritech.co.za</a>
<b>Emergency Number:</b>	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
<b>Chemical Name:</b>	methyl (S)-N-[7-chloro-2,3,4a,5-tetrahydro-4a-(methoxycarbonyl)indeno[1,2-e][1,3,4]oxadiazin-2-ylcarbonyl]-4'-(trifluoromethoxy)carbanilate
2) Classification of the substance / mixture:	
<b>Classification of the product:</b>	Acute oral toxicity: Category 4 (H302) Skin irritation: Category 2 (H315) Specific target organ toxicity – repeated exposure: Category 2 (H373) Hazards to the aquatic environment, chronic: Category 2 (H411)  Full text of symbols and R-phrases: see section 15.
<b>Label elements:</b>	 <p>Signal word: Warning</p> <p>H301 H332 H317 H372 H400 H410</p> <p>P260 P264 P280 P312</p>

	P362 P364 P501  None if the ingredients in the product meets the criteria for being PBT or vPvB
<b>Health effects: eyes:</b>	May cause irritation
<b>Health effects: skin:</b>	May cause irritation
<b>Health effects: ingestion</b>	Harmful if swallowed
<b>Health effects: inhalation</b>	May cause irritation
<b>Health effects: Other</b>	No data available

### 3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

Chemical name	% composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Indoxacarb (S-isomer)	30%	173584-44-6	None	Acute oral toxicity: Category 3 (H301) Acute inhalation toxicity: Category 4 (H332) Sensitisation – skin: Category 1B (H317) Specific target organ toxicity – repeated exposure: Category 1: H372 Acute aquatic toxicity: H400 Acute chronic aquatic toxicity: H410	No data available

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

### 4) First Aid Measures:

<b>Eye contact:</b>	Hold the eye open and rinse slowly and gently with clean water for at least 15 minutes. Occasionally rinse under the eyelids. Remove contact lenses after the first 5 minutes. Consult an eye specialist if irritation persists
<b>Skin contact:</b>	Carefully remove contaminated clothing and shoes and decontaminate before reuse. Wash affected area immediately with soap and water for 15 minutes. Seek medical aid if irritation persists or develops.
<b>Ingestion:</b>	Wash out mouth with water if victim is able, alert and conscious. Never give anything by mouth to an unconscious person. <b>Do not induce vomiting.</b> Keep patient at rest. <b>Seek medical assistance.</b> If vomiting occurs, keep the head lower than hips to prevent aspiration.
<b>Inhalation:</b>	Remove the victim to fresh air. Keep the victim warm and at rest. If breathing stops, administer artificial respiration. <b>Seek medical assistance immediately.</b>
<b>Most important symptoms and effects, acute and delayed:</b>	None known
<b>Indication of immediate medical attention and special treatment needed: Advice to physician</b>	Treat symptomatically and supportively.

### 5) Fire-Fighting Measures:

<p><b>Suitable extinguishing media:</b></p> <p><b>Unsuitable extinguishing media:</b></p> <p><b>Special hazards arising from the substance or mixture:</b></p>	<p>Water spray, Foam, Dry chemical, Carbon dioxide. Water spray may be used for the cooling of unaffected stock.</p> <p>Avoid the use of a solid water stream as this may cause spreading.</p> <p>Fire may produce irritating or poisonous vapours (carbon dioxide, nitrogen oxides)</p>
<p><b>Fire-fighting:</b></p> <p><b>Protective clothing:</b></p>	<p>Remove spectators from the surrounding area. Isolate the affected area and evacuate downwind. Keep upwind. Use the appropriate type of extinguisher for the type of surrounding fire. Fight the fire from the maximum distance using an unmanned hose holder or monitor hoses. Keep containers cool by spraying with water. Contain run off to prevent entry into water or drainage systems. Avoid inhaling hazardous vapours and fumes from the burning materials. Remove unaffected containers from the fire area if possible and if safe to do so. Dyke the fire control water for later disposal. Avoid the accumulation of polluted run-off from the site of the incident.</p> <p><b>Small fires:</b> If the area is heavily exposed to fire and if conditions permit, let the fire burn itself out as water may increase the area contaminated. Cool containers / tanks with water spray.</p> <p>Full protective clothing and self-contained breathing apparatus</p>
<p><b>6) Accidental Release Measures:</b></p>	
<p><b>Personal precautions:</b></p> <p><b>Environmental precautions:</b></p> <p><b>Cleaning procedure:</b></p> <p><b>Disposal:</b></p>	<p>Control access to the area. Avoid skin, eye and clothing contact. Do not breathe in the spray or fumes. For personal protection see Section 8 Ventilate the spill area. Take precautionary measures against static discharges.</p> <p>Do not allow this product to enter drains or watercourses. Any spillages or uncontrolled discharges into any watercourses or public waters must be reported immediately to the police and to the Department of Water / Environmental Affairs. If the spill area is porous, the contaminated material must be collected for subsequent treatment and safe disposal.</p> <p>Wear protective clothing. Clear area of unprotected personnel and keep unprotected personnel upwind. <b>Small spillages:</b> Soak up with an inert absorbent material and sweep up or vacuum up and collect the spillage in suitable, labelled containers for safe disposal. <b>Large spillages:</b> Contain the spillage, soak up with a non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite etc). Transfer to a suitable, labelled container for later safe disposal according to local / national regulations. Large spills should also be collected mechanically (removed by pumping) for safe disposal. Collect any leaking liquid in sealable (metal / plastic) containers. Do not flush the spilled material into the drains. If spill does enter waterways contact the local authority.</p> <p><b>Waste Disposal:</b> In accordance with local and national regulations. Open dumping or burning of this product is prohibited. Waste generated from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus products into public sewers or where there is a danger of run-off or seepage into any water systems. Do not contaminate rivers, dams or other water sources with the product or used containers.</p>



<p><b>Eye protection:</b></p> <p><b>Respiratory protection:</b></p> <p><b>Emergency eye wash:</b></p>	<p>Protect index: class 6 Wearing time &gt; 480 min The instructions regarding permeability and breakthrough time provided by the supplier of the gloves must be observed. Consideration must also be given to the local conditions under which the product is used, e.g. danger of cuts, abrasion and the contact time. Gloves must be discarded and replaced if there is any indication of degradation or chemical breakthrough. Gloves must be cleaned with soap and water before removing them.</p> <p>The use of safety goggles with side shields is recommended.</p> <p>Manufacturing and processing: Half mask with vapour filter. Mixer and loader: Half mask with vapour filter. Spray application – outdoor: Half mask with particle filter. Spray application – indoor: Half mask with particle filter.</p> <p>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.</p>
---	--

### 9) Physical & Chemical Properties:

<b>Form:</b>	Liquid
<b>Colour:</b>	Off-white to brownish
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	No data available
<b>pH:</b>	5.0 – 6.5
<b>Melting point / Freezing point</b>	No data available
<b>Initial boiling point and boiling range</b>	No data available
<b>Flash point:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/ lower flammability or explosive limits:</b>	No data available
<b>Vapour pressure:</b>	No data available
<b>Vapour density:</b>	No data available
<b>Relative density:</b>	1.050 – 1.140 g/L
<b>Solubility(ies)</b>	Suspends in water
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Viscosity:</b>	No data available

### 10) Stability & Reactivity:

<b>Reactivity:</b>	No data available.
<b>Chemical stability:</b>	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
<b>Hazardous decomposition product(s):</b>	No data available
<b>Conditions to avoid:</b>	No data available
<b>Incompatible materials:</b>	No data available

### 11) Toxicological Information:

Acute:

Oral LD50 > 2 000 mg/kg for rats

Dermal LD50 > 4 000 ml/kg for rats.

Inhalation LC50 (4h): >2.0 mg/L for rats

Skin irritation : Not an irritant

Eye irritation : Not an irritant

Sensitisation : Not a skin sensitizer (guinea pigs).

Other : No data available.

## 12) Ecological Information:

### Information below based on active ingredient:

**Bees:** LD50 (oral) 23.33 µg/bee; (contact) 1.34 µg/bee.

**Birds:** Acute oral LD<sub>50</sub> for bobwhite quail 98 mg/kg. Dietary LC<sub>50</sub> (5 d) for mallard ducks >5620, bobwhite quail 808 ppm.

**Fish** : LC<sub>50</sub> (96 h) for bluegill sunfish 0.9, rainbow trout 0.65 mg/l. Daphnia:

**Algae** : No data available

**Worms:** No data available.

**Other aquatic species:** *Daphnia magna*, LC<sub>50</sub> (48 h) 0.60 mg/l.

## 13) Disposal Considerations:

**Waste Disposal** : In accordance with local and national regulations. Open dumping or burning of this product is prohibited.

Waste generated from the use of this product cannot be reused or re-processed.

Never pour untreated waste or surplus products into public sewers or where there is a danger of run-off or seepage into any water systems.

Do not contaminate rivers, dams or other water sources with the product or used containers.

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** : In accordance with local and national regulations.

Empty containers retain vapour and product residues.

Refer to the product label for instructions.

Triple rinse the empty containers.

Do not re-use the empty container for any other purpose. Empty containers must be destroyed by perforation and flattening and then buried in an approved dump site.

Prevent contamination of food, feedstuffs, water and eating utensils.

## 14) Transportation Information:

UN Number: 3082

### Road transport ADR/RID

Class: 9

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid, N. O. S (Indoxacarb)

### Air transport: ICAO / IATA

Class: 9

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid, N. O. S (Indoxacarb)

### Maritime transport: IMDG

Class: 9

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid, N. O. S (Indoxacarb)

## 15) Regulatory Information:

**Symbols:** Xn - Harmful

N - Dangerous for the environment

### Risk – Phrase:

R22 - Harmful if swallowed.

R38 - Irritating to skin.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Safety – Phrase:

S1/2 - Keep locked up and out of reach of children.

S13 - Keep away from food, drink, and animal feedstuffs S20/21 – When using, do not eat, drink or smoke.

S20/21 - When using, do not eat, drink or smoke.

S23 - Do not breathe vapour / spray.

S24 - Avoid contact with skin.

S35 - This material and its container must be disposed of in a safe way S37– Wear suitable gloves.

S46 - If swallowed, seek medical advice immediately and show this container or label. S57 – Use appropriate container to avoid environmental contamination.

### Hazard Statements

H301 - Toxic if swallowed

H332 - Harmful if inhaled

H317 - May cause an allergic skin reaction

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

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

### Precautionary Statements

P260 – Do not breathe vapours.

P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves.

P312 - Call a POISON CENTER or doctor / physician if you feel unwell.

P362 - Take off contaminated clothing.

P364 - Wash contaminated clothing before reuse.

P501 - Dispose of contents / container as hazardous waste

## 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.

The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSES OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.