

Safety Data Sheet

TORPEDO SC - Reg. No: L 7655 (Act No 36 of 1947)

Date of issue: 04/10/2010

Date revised: 29/11/2016

1) PRODUCT AND COMPANY IDENTIFICATION					
Product name:		TORPEDO SC			
Other means of identification:		Flumetsulam 200 g/L SC			
Recommended use:		Herbicide			
Restrictions to use:		Agriculture			
UN No:		3082			
Distributed by:		MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za			
Emergency Number:		POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG:021 931 6129 RED CROSS 021 689 5227 GRIFFON POISON CENTRE: 082 446 8946			
Chemical Name:		2',6'-difluoro-5-methyl[1,2,4]triazolo[1,5-a]pyrimidine-2-sulfonanilide (IUPAC)			
2) Hazards Identification:					
Classification of the product is based on the coformulants listed in section 3		See section 15 for full text safety phrases.			
Label elements:		None.			
Health effects: eyes:		May cause mild irritation.			
Health effects: skin:		May cause mild irritation.			
Health effects: ingestion		May cause irritation and may be harmful.			
Health effects: inhalation		Unlikely to cause harmful effects under normal conditions and use.			
3) Composition Details:					
Chemical name	Composition (g/L)	CAS No.	EC No.	CLP Classification	DSD Classification
Flumetsulam	200	98967-40-9			
Full text of R- and S-phrases: see section 15.					
4) First Aid Measures:					

<p>Inhalation:</p> <p>Skin contact:</p> <p>Eye contact:</p> <p>Ingestion</p> <p>Advice to physician:</p>	<p>Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.</p> <p>Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Persons providing first aid must wear gloves to avoid selfcontamination. Seek medical assistance if irritation occurs.</p> <p>Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance immediately.</p> <p>Never give anything by mouth to an unconscious person. Do not induce vomiting. For advice, contact the National Poisons Centre. The decision of whether to induce vomiting or not should be made by an attending physician. Seek medical assistance immediately.</p> <p>No specific antidote. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.</p>
<p>5) Fire-Fighting Measures:</p>	
<p>Flash point:</p> <p>Extinguishing Media:</p> <p>Unsuitable extinguishing media:</p> <p>Fire Fighting:</p> <p>Special hazards arising from the substance or mixture:</p>	<p>Not flammable.</p> <p>Fine water spray, foam, carbon dioxide. Do not use high volume water jet, due to contamination risk.</p> <p>Water jet, due to contamination risk.</p> <p>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 hose holder or monitor nozzles. Contain fire control agents for later disposal.</p> <p>Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if 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.</p> <p>Generating poisonous and corrosive fumes containing: carbon monoxide, nitrogen oxides and hydrochloric acid.</p> <p>UNUSUAL FIRE OR EXPLOSION HAZARDS: Combustion products are toxic and/or irritant.</p>
<p>Protective clothing:</p>	<p>Full protective clothing and self-contained breathing apparatus</p>
<p>6) Accidental Release Measures:</p>	

<p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Occupational spill:</p>	<p>For personal protection see Section 8. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.</p> <p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.</p> <p>Wear protective clothing. Clear area of unprotected personnel. Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number. Contain runoff to prevent entry into water or drainage systems. Very toxic to algae. Do not contaminate ponds, waterways or ditches with chemical or used container. Wash out thoroughly. Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators. Do not re-use container for any purpose.</p>
<p>7) Handling & Storage:</p>	
<p>Handling:</p> <p>Storage:</p>	<p>Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work</p> <p>Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.</p>
<p>8) Exposure Control / Personal Protection:</p>	
<p>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.</p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Respiratory protection:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Emergency eye wash:</p>	<p>Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.</p> <p>Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.</p> <p>For emergency conditions, use an approved positive pressure self-contained breathing apparatus</p> <p>Use gloves, impervious to this material when prolonged or frequently repeated contact could occur.</p> <p>The use of safety goggles with side shields is recommended.</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>
<p>9) Physical & Chemical Properties:</p>	
<p>Form:</p>	<p>Liquid, suspension concentrate</p>
<p>Colour:</p>	<p>Brown</p>
<p>Odour:</p>	<p>Odourless</p>
<p>Solubility:</p>	<p>Suspends in water</p>

pH:	Not available
Melting point / Freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not flammable
Evaporation rate:	Not available
Flammability (solid, gas)	Not flammable
Upper / lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature:	Not available
Viscosity:	Not available
10) Stability & Reactivity:	
Stability: Conditions to avoid: Incompatible materials: Hazardous decomposition product(s):	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Avoid extremes of temperature and direct sunlight. Strong basic, acidic or oxidising materials. None under normal conditions of storage and use.
11) Toxicological Information:	
Ingestion Single dose oral toxicity is considered to be low. The oral LD50 for rats is >5000 mg/kg. Skin Contact The dermal LD50 for rats is >2000mg/kg. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Essentially non-irritating to skin. Sensitisation Non-sensitising to guinea pig skin. Eye Contact May cause slight transient (temporary) eye irritation. Inhalation Assessment largely or completely based on data for active ingredient. No adverse effects anticipated by this route of exposure incidental to proper handling.	
12) Ecological Information:	
Aquatic Toxicity Material is not harmful to fish on an acute basis (LC50>100mg/L). Material is not harmful to aquatic invertebrates on an acute basis (EC50>100mg/L). Material is very toxic to algae (IC50 <1.0 mg/l). Avian Toxicity Material is practically non-toxic to birds on an acute basis (LD50 >2000mg/kg). Additional Information Material is practically non-toxic to bees on an acute basis. LD50 for earthworms is >1000mg/kg. ENVIRONMENTAL FATE Animals Rapidly cleared via urine and faeces with no metabolites. 5-Hydroxy metabolite found in the hen. Plants DT50 in maize 2h, soya beans 18h, chenopodium 131h. Metabolites depend on the species; 5-hydroxy or 5methoxy derivatives are common. Soil/Environment Flumetsulam is not significantly broken down by hydrolysis or photolysis and in water degradation is due to microbial activity. In soil, flumetsulam is broken down by microbial action. It has a half-life of two weeks to four months, depending on the soil type, pH of the soil, organic matter content, microbial activity and climatic conditions. Degradation is favoured under conditions of high pH. Soil studies have indicated that flumetsulam at recommended label rates has only limited potential to leach into soil structures and is expected to generally remain within the top 30 cm. Any trace residues entering ground water will be degraded by anaerobic or aerobic pathways. If used according to the product label, Torpedo is unlikely to be harmful to the environment.	
13) Disposal Considerations:	

Waste Disposal : Very toxic to algae. Do not contaminate ponds, waterways or ditches with chemical or used container. 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 chemicals waste disposal facility.

Container Disposal : Refer to the product label for instructions.

Container Refilling and Disposal:

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.

14) Transportation Information:

UN NUMBER: 3082

IMO hazardous description:

Road, Rail & Barge

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS FLUMETSULAM 20% W/V)

Truck - Label: 9

Rail - Label: 9

Barge - Label: 9

UN Number: 3082

Sea

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS FLUMETSULAM 20% W/V)

Sea - IMO/IMDG Class: 9

UN Nr: 3082

Label: 9

Packing Group: III

Marine Pollutant: N (Y/N)

Air

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains FLUMETSULAM 20% W/V)

Air-ICAO/IATA Class: 9

UN Nr: 3082

Label: 9

Packing Group: III Pack Instr. Passenger: 914

Pack Instr. Cargo: 914

Remarks: Sample shipment not allowed by mail.

15) Regulatory Information:

Symbol(s): None required **R-phrase(s):**

None required **S-phrase(s):**

S2 – Keep out of reach of children.

S13 – Keep away from food, drink and animal feeding stuffs.

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

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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