

## Safety Data Sheet

### OPTAN 50 SC - Reg. No: L 97878 (Act No 36 of 1947)

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1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	Optan 50 SC
Other means of identification:	Hexaconazole 50 g/L SC
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	NA
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 011 8223494 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:	(±)-α-butyl-α-(2,4-dichlorophenyl)-1 <i>H</i> -1,2,4-triazole-1ethanol
2) Hazards Identification:	
Classification of the product is based on the coformulants listed in section 3	Xn; N; R22; R43; R51; R53 Full text of phrases; see section 15
Label Elements	Hazard symbols: Xn – Harmful N – Dangerous for the environment     Signal word: Harmful
Health effects: eyes:	May cause irritation.
Health effects: skin:	May cause irritation.
Health effects: ingestion	Harmful if swallowed
Health effects: inhalation	May cause irritation
3) Composition Details:	
COMPOSITION	Hexaconazole
	50 g/L
4) First Aid Measures:	

<b>Inhalation:</b>	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. Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice
<b>Skin contact:</b>	<p>Any skin contaminated with the concentrate must be thoroughly washed with soap and water. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice.</p> <p>Flush eyes with plenty of water for at least 15 minutes holding eyelids open. Remove contact lenses. Seek medical assistance if irritation develops or persists..</p> <p>Never give anything by mouth to an unconscious person. Do not induce vomiting. For advice, contact the National Poisons Centre. Seek immediate medical attention. Rinse mouth thoroughly with water. If vomiting occurs, give more water to drink to assist dilution.</p> <p>Treat symptomatically.</p>
<b>Eye contact:</b>	
<b>Ingestion</b>	
<b>Advice to physician:</b>	

<b>5) Fire-Fighting Measures:</b>	
<b>Flash point:</b>	Does not flash.
<b>Extinguishing Media:</b>	Water fog, foam, carbon dioxide or dry chemical.
<b>Fire Fighting:</b>	<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.</p> <p>If involved in a fire, the dehydrated components may emit oxides of carbon and oxides of nitrogen, possibly hydrogen chloride.</p>
<b>Protective clothing:</b>	Full protective clothing and self-contained breathing apparatus
<b>6) Accidental Release Measures:</b>	

<b>Personal precautions:</b>	Avoid contact with skin and eyes. For personal protection see Section 8.
<b>Environmental precautions:</b>	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.
<b>Occupational spill:</b>	Do not eat, drink or smoke during the clean up process. Clear area of unprotected personnel. Prevent product from

	<p>spreading and collect into specially marked, tightly closing containers. Treat contaminated areas with water containing soda or detergent. Dike spill area and collect washings to avoid any contamination of surface and ground water, water supplies and drains. Heavily contaminated soil layers should be removed and disposed of in an approved way. Rinse the spill area and any tools or implements several times with soapy water. Contain and adsorb the rinsate with inert absorbents and place into the same disposal container as the spill material. Notify regulatory authorities if necessary. Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect in sealed open top containers for disposal.</p>
<b>7) Handling &amp; Storage:</b>	
<p><b>Handling:</b></p> <p><b>Storage:</b></p>	<p>Wash hands thoroughly with soap and water before breaks and immediately after handling the product. Do not eat, drink, smoke or apply cosmetics when there is a possibility of exposure to the product. Wash goggles or face shield and contaminated clothing thoroughly after each day's use. Wash gloves after each days use. Wash hands after use.</p> <p>Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.</p>
<b>8) Exposure Control / Personal Protection:</b>	
<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><b>Occupational Exposure Limits:</b></p> <p><b>Engineering Controls:</b></p> <p><b><u>PERSONAL PROTECTIVE EQUIPMENT:</u></b></p> <p><b>Clothing:</b></p> <p><b>Respiratory protection:</b></p> <p><b>Gloves:</b></p> <p><b>Eye protection:</b></p> <p><b>Emergency eye wash:</b></p>	<p>Data not available</p> <p>Data not available</p> <p>Consult supplier to confirm that the equipment is suitable.</p> <p>Suitable, impervious overalls</p> <p>Not normally required. If inhalation is likely, an approved respirator should be worn. Generally natural ventilation is adequate.</p> <p>PVC, neoprene or natural rubber gloves.</p> <p>Safety goggles if exposure is possible.</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>
<b>9) Physical &amp; Chemical Properties:</b>	
<b>Form:</b>	Suspension
<b>Colour:</b>	White
<b>Odour:</b>	Characteristic
<b>Solubility:</b>	Disperses in water
<b>pH:</b>	6.7
<b>Odour threshold:</b>	No data available
<b>Melting point / Freezing point</b>	110 – 112°C

<b>Initial boiling point and boiling range</b>	No data available
<b>Flash point:</b>	Do not flash
<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>	0.018 mPa (20°C)
<b>Vapour density:</b>	No data available
<b>Relative density:</b>	1.29 g/cm <sup>3</sup>
<b>Partition coefficient: n-octanol/water</b>	3.9
<b>Auto-ignition temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>10) Stability &amp; Reactivity:</b>	
<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to avoid:</b>	Protect from heat sources.
<b>Incompatible materials:</b>	No data available
<b>Hazardous decomposition product(s):</b>	Heating can release vapours which can be ignited.
<b>11) Toxicological Information: Hexaconazole</b>	
<p>Oral : LD<sub>50</sub> &gt;5000 mg/kg, rat.  Dermal : LD<sub>50</sub> &gt;2000 mg/kg, rat. Inhalation :  LC50 (4h) &gt;5.9 mg/L.</p> <p>Skin irritation: Mild irritant.  Eye irritation : Mild irritant.  Sensitization : Should not cause sensitization by skin contact.</p>	
<b>12) Ecological Information:</b>	
<p><b>Acute Toxicity - Fish</b> The following is data for the active ingredient, hexaconazole. LC50 (96 hr) for rainbow trout is 3.4 mg/l.  LC50 (96 hr) for mirror carp is 5.94 mg/l.  LC50 (96 hr) for sheepshead minnow is 5.4 mg/l.</p> <p><b>Acute Toxicity - Daphnia</b>  LC50 (48 hr) for hexaconazole is 2.9 mg/l.</p> <p><b>Acute Toxicity – Other Organisms</b>  The following data is for the active ingredient, hexaconazole.</p> <p>Birds: Not toxic to birds. LD50 for mallard duck is &gt;4000 mg/kg Bees:  Not toxic to bees. LD50 &gt;100 µg/bee.</p> <p>Persistence: Rapidly degraded in soils in laboratory tests.</p>	
<b>13) Disposal Considerations:</b>	

**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 at an approved chemicals waste disposal facility.

**Container Disposal :** Triple or pressure rinse containers before disposal. Do not dispose of undiluted chemical on-site. If recycling, close container and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation or tree roots. Empty containers and product should not be burnt. Dispose of waste product at a reputable waste disposal contractor.

#### 14) Transportation Information:

UN NUMBER: Not allocated

Road Transport ADR/ RID:  
Considered not dangerous for transport.

Maritime Transport IMDG / IMO:  
Considered not dangerous for transport.

#### 15) Regulatory Information:

##### Symbol(s):

##### R-phrase(s):

**R22** Harmful if swallowed.  
**R43** May cause sensitization by skin contact.  
**R51** Toxic to aquatic organisms.  
**R53** May cause long-term adverse effects in the aquatic environment.

##### S-phrase(s):

**S2** - Keep out of reach of children.  
**S3/7** Keep container tightly closed in a cool place.  
**S13** – Keep away from food, drink and animal feeding stuffs. **S20/21** – When using, do not eat drink or smoke.  
**S24/25** - Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves.  
**S27** Take off immediately all contaminated clothing.  
**S35** - This material and its container must be disposed of in a safe way.  
**S36/37** – Wear suitable protective clothing and gloves.  
**S57** - Use appropriate containment to avoid environmental contamination.  
**S46** If swallowed, seek medical advice immediately and show this container or label.

#### 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.

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