

Safety Data Sheet

Imazalil sulphate L7285 (Act 36 of 1947)

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1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	Imazalil sulphate
Other means of identification:	Imazalil sulphate 750 g/kg WSP
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	2588
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:	1-[2-(Allyloxy)ethyl-2-(2,4-dichlorophenol)]-1H-imidazolium hydrogen sulphate
2) Hazards Identification:	
Classification of the product is based on the coformulants listed in section 3	Xn; N; R22; R41; R50/53 S: 2, 24/25-27, 26, 46, 60/61 Full text of phrases: see section 15
Label Elements	  <p>Hazard symbols: Xn – Harmful N – Dangerous for the environment</p> <p>Signal Word: Warning</p>
Health effects: eyes:	May cause mild to moderate irritation.
Health effects: skin:	Only slightly toxic with possible sensitisation
Health effects: ingestion	Minimally harmful if swallowed
Health effects: inhalation	May irritate respiratory system

3) Composition Details:	
COMPOSITION	Imazalil
	750 g/kg
4) First Aid Measures:	
Inhalation: Skin contact: Eye contact: Ingestion Advice to physician:	<p>Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. Administer oxygen or artificial respiration if necessary. Seek medical assistance if necessary.</p> <p>Strip off all contaminated clothing and thoroughly wash body with soap and water. Persons providing first aid must wear gloves to avoid self-contamination. Get medical attention if necessary. Skin which becomes sensitised may require anti-inflammatory agents or cortisone creams.</p> <p>Flush eyes with plenty of water for 15 minutes holding eyelids open. Seek medical assistance if necessary. Use safety goggles.</p> <p>In cases where significant quantities of the product have been ingested, call a physician and show this data sheet. Never give anything by mouth to an unconscious person.</p> <p>No specific antidotes are available. Give symptomatic treatment and supportive therapy as indicated. If large quantities of the fungicide have been ingested and if severe vomiting has occurred, perform gastric lavage and administer activated charcoal. If ingestion was minimal, administration of charcoal without gastric lavage together with close observation of the patient, should be sufficient to ensure full recovery.</p>
5) Fire-Fighting Measures:	
Flash point: Extinguishing Media: Fire Fighting:	<p>Not highly flammable</p> <p>For small fires, use foam, carbon dioxide, dry powder or halon extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Water can be used for cooling of unaffected stock, but avoid the accumulation of polluted run-off from the site. Contain fire control water for later disposal.</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. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water</p>

<p>Protective clothing:</p>	<p>can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Avoid pollution of waterways. On small fires: If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with spray water. Generating poisonous and corrosive fumes.</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>Avoid contact with skin and eyes. Do not breathe in spray or fumes. 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. Sweep up with damp earth, sand or suitable absorptive material without causing a dust cloud. Prevent product from spreading and collect into specially marked, tightly closing containers. Treat contaminated areas with water containing soda or detergent. 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.</p> <p>Disposal: 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.</p>
<p>7) Handling & Storage:</p>	
<p>Handling:</p> <p>Storage:</p>	<p>Avoid skin and eye contact and inhalation of spray mist. Avoid inhalation of fog and vapours. Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers</p> <p>Store in original container tightly closed and in a locked, dry, cool, well-ventilated area away from foodstuffs, fertilisers and seeds and out of direct sunlight. Keep away from children or uninformed persons.</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</p>	

<p>exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.</p> <p>Occupational Exposure Limits:</p> <p>Engineering Controls:</p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Emergency eye wash:</p>	<p>TLV not established</p> <p>Facilities should be equipped with an eyewash facility and a safety shower.</p> <p>Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. cotton overalls buttoned to the neck and wrist, water resistant footwear and a washable hat.</p> <p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance (elbow-length PVC gloves)</p> <p>Chemically resistant eye goggles or face mask</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>Soluble powder</p>
<p>Colour:</p>	<p>White to off-white powder</p>
<p>Odour:</p>	<p>Phenolic odour</p>
<p>pH:</p>	<p>1 – 3</p>
<p>Odour threshold:</p>	<p>No data available</p>
<p>Melting point / Freezing point</p>	<p>Between 118 – 130°C</p>
<p>Initial boiling point and boiling range</p>	<p>No data available</p>
<p>Flash point:</p>	<p>No data available</p>
<p>Evaporation rate:</p>	<p>No data available</p>
<p>Flammability (solid, gas)</p>	<p>Not highly flammable</p>
<p>Upper/ lower flammability or explosive limits:</p>	<p>No data available</p>
<p>Vapour pressure:</p>	<p>No data available</p>
<p>Vapour density:</p>	<p>No data available</p>
<p>Relative density:</p>	<p>No data available</p>
<p>Solubility(ies)</p>	<p>Insoluble in water. Soluble in alcohols and slightly soluble in non-polar solvents.</p>
<p>Partition coefficient: n-octanol/water</p>	<p>No data available</p>

Auto-ignition temperature:	No data available
Viscosity:	No data available
10) Stability & Reactivity:	
Stability: Conditions to avoid: Incompatible materials: Hazardous decomposition product(s):	Stable under normal conditions, but decomposes upon exposure to light. Protect from direct sunlight, open flames and heat sources. Decomposes upon heating. Strong oxidizing agents, strong acids, reducing agents and bases. Generating poisonous and corrosive fumes.
11) Toxicological Information:	
Oral : LD ₅₀ > 227mg/kg, rat. Dermal : LD ₅₀ > 4 200 mg/kg, rabbit. Inhalation : LC ₅₀ (4h) > 2.43 mg/L, rat. Skin irritation: May cause slight irritation Eye irritation : Mild irritant, rabbit. Sensitization : May cause sensitization.	
12) Ecological Information:	
Bees : Not hazardous to bees when used as directed. LD50 (oral) 40 µg/bee. Birds : LD50 for ring-necked pheasants 2000, quail 510 mg/kg. LC50 (8 d) for mallard ducks >2510 mg/kg b.w. Fish : LC ₅₀ (96 h) for rainbow trout 1.5, bluegill sunfish 4.04 mg/l. Daphnia : LC ₅₀ (48 h) 3.5 mg/l. Algae : EC ₅₀ 0.87 mg/l Worms : LC ₅₀ for <i>Eisenia foetida</i> 541 mg/kg soil Persistence: Imazalil was 9% mineralised after 100 d in soil; K _{oc} /K _{om} 2080–8150 mg/l	
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 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 NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.	
14) Transportation Information:	
UN NUMBER: 2588 Road Transport ADR/ RID: Class: 9 Packaging group: III Labelling no: 9 Shipping name: PESTICIDES. SOLID, TOXIC , N.O.S., Imazalil sulphate Air Transport IATA / IMO: Class: 9 Packaging group: III Labelling no: 9 Shipping name: PESTICIDES. SOLID, TOXIC , N.O.S., Imazalil sulphate Maritime Transport IMDG / IMO: Class: 9 Packaging group: III Labelling no: 9 Shipping name: PESTICIDES. SOLID, TOXIC , N.O.S., Imazalil sulphate Marine Pollutant Yes	
15) Regulatory Information:	

Symbol(s):	Xn – Harmful N-Dangerous for the environment.
R-phrase(s):	R20/22 – Harmful by inhalation and if swallowed.
S-phrase(s):	S2 - Keep out of reach of children. S13 – Keep away from food, drink and animal feeding stuffs. S24/25 – Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek advice. S37/39 –Wear suitable gloves and eye/face protection. S60 - This material and its container, must be disposed of as hazardous waste. S61 – Avoid release to the environment

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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