


# SAFETY DATA SHEET

Issue No: 1.2	Revision date: 2 October 2023 First print date: 1 October 2019
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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	<b>ImazaCure 750 SP</b>
Other names;	Imazalil as Sulphate
Recommended Use:	Agricultural Fungicide
Supplier:	ICA International Chemicals (Pty) Ltd
Address:	28 Planken Street Plankenbrug Industrial STELLENBOSCH · 7600 · SOUTH AFRICA
Telephone No:	+27-21 886 9812
Fax No:	+27-21 886 8209
Emergency Tel No:	Griffon Poison Information Centre: +27-82 446 8946 Human Poison Helpline: +27-861 555 777

## 2. HAZARD IDENTIFICATION

GHS Classification of product	Acute Toxicity Oral – Category 4 Skin Sensitization – Category 1 Acute Aquatic Toxicity – Category 1 Chronic Aquatic Toxicity – Category 1
Label Elements Classification and Labelling of Chemicals (GHS) Rev 9, 2021; Regulation EC No. 1272/2008 [EU-GHS/CLP]	
Signal word	<b>WARNING</b>
Hazard Statements	H302 – Harmful if swallowed H317 – May cause an allergic skin reaction H410 – Very toxic to aquatic life with long lasting effects
General Precautionary Statements	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read carefully and follow all instructions.
Prevention Precautionary Statements	P203: Obtain, read, and follow all safety instructions before use. P261: Avoid breathing dust/mist/spray P264: Wash hands and exposed skin thoroughly after handling. P270: Do not eat, drink, or smoke when using this product. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment.
Response Precautionary Statements	P280: Wear protective gloves, protective clothing, eye and face protection. P301 + P330 P317: IF SWALLOWED: Rinse mouth. Get medical help. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P321: Specific treatment, see section 4 for first aid measures. P333 + P317: If skin irritation or rash occurs: Get medical help. P362 + P364: Take off contaminated clothing and wash it before reuse. P391: Collect spillage.
Disposal Precautionary Statements	P501: Dispose of contents and container in accordance with national regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS NO:	CONCENTRATION % (w/w)	CLASSIFICATION EC 1272/2008
Imazalil sulphate (solid) (Contains 75% imazalil)	58594-72-2	100	Acute Oral Toxicity Category 4, H302; Skin Sensitization Category 1, H317; Aquatic Acute Category 1, H400; Aquatic Chronic Category 1, H410

There are no additional ingredients present which, within the current knowledge of the provider of this SDS, and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. See section 16 for legend of additional H-phrases not in section 2.

### 4. FIRST AID MEASURES

Show this SAFETY DATA SHEET to a doctor.

#### INHALATION:

- Remove the victim from immediate source of exposure. Move victim to fresh air, if it can be done safely, and keep comfortable.
- If victim's breathing has stopped, perform artificial respiration.
- DO NOT perform mouth-to-mouth resuscitation if victim ingested or inhaled the substance; wash face and mouth before giving artificial respiration. Use a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if victim's breathing is difficult or irregular.
- Get medical help.

#### SKIN:

- Remove and isolate contaminated clothing, shoes, and leather goods immediately and take a shower.
- Rinse affected areas (skin) immediately with non-abrasive soap or mild detergent and large amounts of running water. Wash contaminated clothing before reuse.
- Get medical help if irritation develops and persists.
- In case of burns, IMMEDIATELY cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.

#### EYES:

- Rinse eyes IMMEDIATELY with clean running water for at least 15 minutes, while holding eyelids apart.
- Remove contact lenses after 5 minutes if present and easy to do.
- Continue rinsing while holding eyelids apart.
- Seek medical help if irritation continues.

#### INGESTION:

- If swallowed, DO NOT induce vomiting, unless instructed to do so by poison control center or doctor.
- Rinse mouth and have person sip a glass of water if able to swallow.
- Never give anything by mouth to an unconscious person.
- If vomiting does occur, keep on giving fluids. Get medical help.

#### NOTE TO PHYSICIAN:

- There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient.

#### POTENTIAL HEALTH EFFECTS, ACUTE AND DELAYED:

- Product is corrosive to skin and may also be corrosive to respiratory and digestive tract.

### 5. FIRE FIGHTING MEASURES

#### SUITABLE EXTINGUISHING MEDIA:

**Small fires:** Dry chemical powder, carbon dioxide (CO<sub>2</sub>) or water spray.

**Large fires:** Dry-chemical, CO<sub>2</sub>, water spray, or alcohol-resistant foam

#### FIRE INVOLVING TANKS:

Cool containers with flooding quantities of water until well after fire is out. DO NOT get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

#### UNSUITABLE EXTINGUISHING MEDIA:

DO NOT use high volume water jet, due to contamination risk.

#### SPECIFIC EXTINGUISHING METHODS:

Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Collect contaminated extinguishing water separately; do not allow contaminated water to reach the sewage or effluent systems.

#### SPECIFIC HAZARDS ARISING FROM COMBUSTION PRODUCTS:

In case of fire, the formation of irritating, corrosive and/or toxic gases can be expected.

**PRECAUTIONS FOR FIRE FIGHTERS:**

Fire fighters should wear full protective gear including self-contained breathing apparatus (SCBA). Fight fire from safe distance. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before reuse. Severely contaminated clothing cannot be adequately decontaminated and must be disposed as a hazardous waste. Shower with soap and water after contact with chemical product.

**FURTHER INFORMATION:**

- If possible, safely move undamaged intact containers away from the area around the fire.
- Keep containers cool by spraying with water if exposed to fire.
- Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
- In case of fire and/or explosion do not breathe fumes.

**6. ACCIDENTAL RELEASE MEASURES**

**SPILL OR LEAK**

**PERSONAL PRECAUTIONS:**

Avoid contact with skin and eyes. Do not touch or walk through spilled material. Do not inhale spray or fumes.

**PROTECTIVE EQUIPMENT:**

Wear personal protective clothing and equipment (see section 8).

**EMERGENCY PROCEDURES:**

Keep people and animals away. Eliminate all ignition sources (no smoking, flares, sparks, or flames) from immediate area. All equipment used when handling the product must be grounded.

**ENVIRONMENTAL PRECAUTIONS:**

Use water spray to reduce vapours or divert vapour cloud drift.

PREVENT spilled material from entering waterway and sewer systems, basements, and confined areas. If the product contaminates rivers and lakes or waterways immediately inform respective authorities.

**METHODS AND MATERIALS FOR CONTAINMENT:**

Collect spills by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in clearly marked waste containers.

**METHODS AND MATERIALS FOR CLEANING UP:**

Contain spillage, and then collect and place in container for disposal according to local / national regulations (see section 13). Use clean, non-sparking tools to collect absorbed material.

**SECONDARY DISASTER PREVENTION MEASURES:**

NA

**7. HANDLING AND STORAGE**

**7.1: PRECAUTIONS FOR SAFE HANDLING:**

- Suitable Technical Measures
- Suitable Precautions
- Prevention of contact

- Always store fungicides in their original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning.
- Never transfer to soft drink bottles or other food containers. Children or others may mistake them for something to eat or drink.
- Wear suitable protective clothing which include chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves.
- Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Wash hands, arms, and face after application. Wash gloves and contaminated protective clothing daily before reuse.

**7.2: CONDITIONS FOR SAFE STORAGE:**

- Suitable Technical Measures
- Separation measures from incompatible substances and mixtures

- Keep out of reach of unauthorized persons, children, and animals. Always store fungicides in their original containers, closed with original cap and the original label, in a cool, dry, and well-ventilated area out of direct sunlight.
- Segregate from foods and animal feeds.
- DO NOT reuse the container for any other purpose.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**ADI – Acceptable Daily Intake**

0,025 mg kg<sup>-1</sup> bw day<sup>-1</sup>

**AOEL –Accepted Operator Exposure Level**

0,05 mg kg<sup>-1</sup> bw day<sup>-1</sup>

No unacceptable risk for operators or other workers identified

**NATIONAL EXPOSURE STANDARDS:**

Not available.

**BIOLOGICAL LIMIT VALUES:**

Not available

**ENGINEERING CONTROLS:**

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. If airborne dust are generated use local exhaust ventilation controls. Facilities should be equipped with an

eyewash station and a safety shower. Where necessary, seek additional occupational hygiene advice.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Respiratory Protection:** Where exposure through inhalation may occur when handling and/or when preparing the application mixture, wear a face mask. If the product is used in confined spaces a respirator suitable for protection from dusts and mists of pesticides is adequate.

**Hand Protection:** Wear chemical-resistant gloves made of any waterproof material such as nitrile rubber. Glove thickness: 0.5 mm

**Eye Protection:** The use of safety goggles (full-face shield) is recommended.

**Skin and Body Protection:** Wear suitable protective clothing which include chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves. Remove and wash contaminated protective clothing daily.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	Solid
<b>COLOUR:</b>	White/cream
<b>ODOUR:</b>	Strong chemical
<b>MELTING POINT / FREEZING POINT °C:</b>	118 – 130 °C
<b>BOILING POINT:</b>	> 340 °C
<b>FLAMMABILITY:</b>	Not available
<b>EXPLOSIVE LIMITS:</b>	Not expected
<b>FLASH POINT:</b>	Non observed
<b>AUTO-IGNITION TEMPERATURE:</b>	Not available
<b>DECOMPOSITION TEMPERATURE of a.i:</b>	Not available
<b>PH (1% IN WATER):</b>	1.0 – 3.0
<b>KINEMATIC VISCOSITY:</b>	Not available
$\text{Kinematic viscosity} = \frac{\text{Dynamic viscosity (mPa/s)}}{\text{Density (g/cm}^3\text{)}}$	
<b>VISCOSITY:</b>	Not available
<b>DENSITY / RELATIVE DENSITY:</b>	~1,35 g/mℓ
<b>SOLUBILITY - WATER (a.i):</b>	3,82 (pH 9,2 buffer)
<b>N-OCTANOL / WATER PARTITION COEFFICIENT (a.i):</b>	Not available
<b>VAPOUR PRESSURE:</b>	0,158 mPa (20 °C)
<b>RELATIVE VAPOUR DENSITY:</b>	Not available
<b>PARTICLE CHARACTERISTICS (SOLIDS)</b>	Powder

## 10. STABILITY AND REACTIVITY

<b>REACTIVITY:</b>	Stable under normal conditions, will dissolve in fire-fighting water, forming acidic solution.
<b>CHEMICAL STABILITY:</b>	Stable under normal use and storage conditions for at least 2 years.
<b>HAZARDOUS REACTION:</b>	Hazardous polymerization is not expected to occur.
<b>CONDITIONS TO AVOID:</b> (e.g. – heat, pressure, static discharge, shock, or vibration)	Avoid storage in moist or hot conditions, near to heat or ignition sources. Keep away from food, drink and open bodies of water.
<b>INCOMPATIBLE MATERIALS:</b>	Strong acids, Strong oxidizers, Strong bases, Reducing agents, Oxidizing agents
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	When heated to decomposition, irritant or dangerous fumes/vapours may be emitted. See section 5.

## 11. TOXICOLOGICAL INFORMATION

	<b>ANIMAL ACUTE TOXICITY DATA</b>	
<b>ORAL:</b>	LD <sub>50</sub> (rat) = 350 mg a.i. /kg bw	<b>Category 4</b>
<b>DERMAL:</b>	LD <sub>50</sub> (rat) > 2000 mg a.i. /kg bw	Not Classified
<b>INHALATION:</b>	LC <sub>50</sub> (4h) rat > 3 mg a.i. /ℓ	Not Classified
<b>SKIN IRRITATION / CORROSION:</b>	≥ 5 %	<b>Category 1B</b>
<b>SERIOUS EYE IRRITATION / DAMAGE:</b>		Not Classified
<b>RESPIRATORY OR SKIN SENSITIZATION:</b>	≥ 0.1 % (skin)	<b>Category 1</b>

GERM CELL MUTAGENICITY:	Not Classified
CARCINOGENICITY:	Not Classified
REPRODUCTIVE TOXICITY:	Not Classified
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:	Not Classified
SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:	Not Classified
ASPIRATION HAZARD:	Not Classified

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY:

IMAZALIL SULPHATE	Birds: LD <sub>50</sub> (oral)	<i>Coturnix japonica</i> Acute LD <sub>50</sub> = 510 mg/kg bw/day
	Fish: LC <sub>50</sub>	<i>Oncorhynchus mykiss</i> (Rainbow trout) Acute (96h) LC <sub>50</sub> = 1,88 mg a.i./ℓ
	Aquatic invertebrates - <i>Daphnia</i>	<i>Daphnia magna</i> (Water flea) Acute (48h) EC <sub>50</sub> = 3,5 mg a.i./ℓ
	Aquatic crustaceans	<i>Americamysis bahia</i> Acute (96h) LC <sub>50</sub> = mg a.i./ℓ
	Algae - EC <sub>50</sub> / NOEC	<i>Raphidocelis subcapitata</i> Acute (72h) EC <sub>50</sub> = 0,87 mg a.i./ℓ
	Bees	<i>Apis mellifera</i> Acute contact 48-hour LD <sub>50</sub> = 39 (mg.bee <sup>-1</sup> ) Acute oral 48-hour LD <sub>50</sub> = 35,1 (mg.bee <sup>-1</sup> )
	Earthworms: LC <sub>50</sub> /NOEC	<i>Eisenia fetida</i> Acute (14-day) LC <sub>50</sub> = 271 mg a.i./kg d.w. soil

### AQUATIC TOXICITY:

#### Summation Method

Aquatic Acute – **Category 1**

Aquatic Chronic – **Category 1**

### PERSISTENCE, DEGRADABILITY AND MOBILITY:

Moderately persistent. Biodegrades slowly. Non-mobile in soil

### BIO-ACCUMULATIVE POTENTIAL:

Do not bioaccumulate

### SOIL MICRO-ORGANISMS:

Carbon transformation

No significant adverse/long-term effect

Nitrogen transformation

No significant adverse/long-term effect

## 13. DISPOSAL CONSIDERATIONS

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities.

**TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Containers with water-soluble granules must be completely emptied before being disposed of. Invert and shake thoroughly into the applicator to ensure the container is empty. Triple rinse the empty container with clean water equal to a minimum of 30% of the volume of the container. Add rinsing to the contents of the spray tank. Offer container for recycling or puncture and dispose of at authorised landfill ([www.croplife.co.za](http://www.croplife.co.za)). Do not use container for any other purpose.

## 14. TRANSPORT INFORMATION

UN NUMBER:	3077
UN PROPER SHIPPING NAME:	ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID (Imazalil as sulphate)
TRANSPORT HAZARD CLASS(ES):	Class 9
PACKING GROUP:	III (low danger)
TRANSPORT PICTOGRAMS:	



### ENVIROMENTAL HAZARD:

Marine Pollutant: Yes – Category 1

### TRANSPORT IN BULK:

Not applicable, not to be transported in bulk.

**SPECIAL PRECAUTIONS FOR USER:** Keep dry.

## 15. REGULATORY INFORMATION

Conform to South African Regulation for Hazardous Chemical Agents, 2021.

Product: South African registration number L7928, Act 36 of 1947.

SDS valid for five years from date of issue.

## 16. OTHER INFORMATION

**Legend:** Full text of H-Statements referred to under sections 3:

H314 – Causes severe skin burns and eye damage

H317 – May cause an allergic skin reaction

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects.

**Key literature references and sources of data:** Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2021. UN Model Regulations Rev. 22 (2021). EU REGULATION (EC) No 1272/2008.

This Safety Data Sheet (SDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how to prevent accidents in the normal workplace including in conjunction with other products.

The information was obtained from sources which we believe are reliable. However, the information is provided in good faith. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and for these reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used for this product only.

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END of SDS