

SAFETY DATA SHEET

Issue No: 1.2	Revision date: 11 October 2024 First print date: August 2024
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	NaturaFend 550 SP
Other means of identification:	L-Phenylalanine 550 g/kg
Recommended Use:	Agricultural pesticide/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 Aquatic Toxicity – Category 2
Label Elements	-
Classification and Labelling of Chemicals (GHS) Rev 10, 2023; Regulation EC No. 1272/2008 [EU-GHS/CLP]	-
Signal word	-
Hazard Statements	H401 – Toxic to aquatic life
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. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye and face protection. P264 + P265: Wash hands and face thoroughly after handling. Do not touch eyes. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. 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
Amino acid: L-Phenylalanine	63-91-2	55 %	Not classified
Polyoxyethylene Lauryl Ether	68439-50-9	<10 %	Eye Dam. 2 H319 Aquatic Acute 1 H400 Aquatic Chronic 3 H412

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:	<ul style="list-style-type: none"> 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.
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SKIN:	<ul style="list-style-type: none"> · 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. · Remove and isolate contaminated clothing, shoes, and leather goods and take a shower. · Rinse affected areas (skin) 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.
EYES:	<ul style="list-style-type: none"> · Rinse eyes 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:	<ul style="list-style-type: none"> · If swallowed, DO NOT induce vomiting, unless instructed to do so by poison control center or doctor. · 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:	<ul style="list-style-type: none"> · No adverse effects expected if inhaled, ingested or by dermal contact. There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient.
POTENTIAL HEALTH AFFECTS, ACUTE AND DELAYED	Effects of exposure (inhalation, ingestion, or skin contact) to substances may be delayed.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Small fires: Foam, carbon dioxide or water spray.
FIRE INVOLVING TANKS:	Large fires: Foam, carbon dioxide or water spray.
UNSUITABLE EXTINGUISHING MEDIA:	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.
SPECIFIC EXTINGUISHING METHODS:	DO NOT use high volume water jet, due to contamination risk.
SPECIFIC HAZARDS ARISING FROM COMBUSTION PRODUCTS:	Collect contaminated extinguishing water separately; do not allow contaminated water to reach the sewage or effluent systems.
PRECAUTIONS FOR FIRE FIGHTERS:	In case of fire, the formation of Carbon monoxide (CO), Nitrogen oxides (NO _x), Hydrogen chloride (HCl), Hydrogen fluoride (HF), Hydrogen cyanide (HCN), Formaldehyde (CH ₂ O), Oxygen (O ₂), or Phosgene (COCl ₂) can be expected.
FURTHER INFORMATION:	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. Shower with soap and water after contact with chemical product.
FURTHER INFORMATION:	<ul style="list-style-type: none"> · 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. Use water spray to reduce vapours or divert vapour cloud drift.

ENVIRONMENTAL PRECAUTIONS:	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:	Contain spills, remove 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

PRECAUTIONS FOR SAFE HANDLING:	<ul style="list-style-type: none"> · Always store products in their original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning. · Never transfer product to soft drink bottles or other containers. Children or others may mistake them for something to eat. · 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.
<ul style="list-style-type: none"> - Suitable Technical Measures - Suitable Precautions - Prevention of contact 	
CONDITIONS FOR SAFE STORAGE:	<ul style="list-style-type: none"> · Keep out of reach of unauthorized persons, children, and animals. Always store product 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.
<ul style="list-style-type: none"> - Suitable Technical Measures - Separation measures from incompatible substances and mixtures 	

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ADI – Acceptable Daily Intake	Not available
AOEL – Accepted Operator Exposure Level	Not available
NATIONAL EXPOSURE STANDARDS:	Not available
BIOLOGICAL LIMIT VALUES:	Not available
ENGINEERING CONTROLS:	If airborne dust is 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:	<p>Respiratory Protection: Where exposure through inhalation may occur when handling and/or when preparing the spray 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.</p> <p>Hand Protection: Wear chemical-resistant gloves made of any waterproof material such as nitrile rubber. Glove thickness: 0.5 mm</p> <p>Eye Protection: The use of safety goggles (full-face shield) is recommended.</p> <p>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.</p>

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid (powder)
COLOUR:	White
ODOUR:	Odourless
MELTING POINT °C (a.i.):	270 and 284 °C
BOILING POINT:	L-Phenylalanine decomposes when reaching its melting point
DECOMPOSITION TEMPERATURE (a.i):	295 °C
FLAMMABILITY:	Nonflammable
EXPLOSIVE LIMITS:	Nonexplosive
FLASH POINT:	No flash point
AUTO-IGNITION TEMPERATURE:	Not applicable
pH (1% IN WATER):	pH 6

KINEMATIC VISCOSITY:	Not applicable
VISCOSITY:	Not applicable
DENSITY / RELATIVE DENSITY:	0,7-0,8 g/cm ³
SOLUBILITY - WATER (a.i):	25.02 g/L at 20 °C
N-OCTANOL / WATER PARTITION COEFFICIENT (a.i):	Log P _{ow} = 1.52
VAPOUR PRESSURE (a.i):	0.000000176 mm Hg at 25 °C
RELATIVE VAPOUR DENSITY:	Not available
PARTICLE CHARACTERISTICS: (SOLIDS)	Not applicable

10. STABILITY AND REACTIVITY

REACTIVITY:	Stable under normal conditions no reaction with fire-fighting water.
CHEMICAL STABILITY:	Stable under normal use and storage conditions for at least 2 years.
HAZARDOUS REACTION:	Hazardous polymerization is not expected to occur.
CONDITIONS TO AVOID: (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.
INCOMPATIBLE MATERIALS:	None specified, advisable to avoid strong acids, strong oxidizers, strong bases, anionic compounds, reducing agents, oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated to decomposition, irritant or dangerous fumes/vapours may be emitted. See section 5.

11. TOXICOLOGICAL INFORMATION

ANIMAL ACUTE TOXICITY DATA (ATE)

ORAL:	Not Classified
DERMAL:	Not Classified
INHALATION:	Not Classified
SKIN IRRITATION / CORROSION:	Not Classified
SERIOUS EYE IRRITATION / DAMAGE:	Category 1
RESPIRATORY OR SKIN SENSITIZATION:	Not Classified
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:

L-Phenylalanine	Birds: LD ₅₀ (oral)	<i>Colinus virginianus</i> (Bobwhite quail) Acute LD ₅₀ mg a.i./kg bw/day LC ₅₀ /LD ₅₀ mg a.i. /kg diet Chronic NOEL = mg a.i. /kg bw/day
	Fish: LC ₅₀	<i>Oncorhynchus mykiss</i> (Rainbow trout) Acute (96h) LC ₅₀ > 100 mg a.i./ℓ
	Aquatic invertebrates	<i>Daphnia magna</i> (Water flea) Acute (48h) EC ₅₀ > 100 mg a.i./ℓ
	Algae - EC ₅₀	<i>Desmodesmus subspicatus</i> Acute (72h) EC ₅₀ = >100 mg a.i./ℓ
	Bees	<i>Apis mellifera</i> Not toxic
	AQUATIC TOXICITY:	<u>GHS classification on product</u> Aquatic Acute – Category 2
PERSISTENCE, DEGRADABILITY AND MOBILITY:	Readily biodegradable	

BIO-ACCUMULATIVE POTENTIAL:	No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).	
SOIL MICRO-ORGANISMS:	Carbon transformation	No significant adverse/long-term effect expected
	Nitrogen transformation	No significant adverse/long-term effect expected

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.

Solid

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Containers must be completely emptied before being disposed of. Invert and shake empty containers 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. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

ROAD AND RAILWAY TRANSPORT ADR/RID:

UN NUMBER:	Not Regulated for transport
UN PROPER SHIPPING NAME:	-
TRANSPORT HAZARD CLASS(ES):	-
PACKING GROUP:	-
TRANSPORT PICTOGRAMS:	-
ENVIROMENTAL HAZARD:	Enviromental Acute Category 2
TRANSPORT IN BULK:	Not applicable, not to be transported in bulk.
SPECIAL PRECAUTIONS FOR USER:	Not applicable

15. REGULATORY INFORMATION

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

Product: South African registration number L11632

SDS valid for five years from date of issue.

16. OTHER INFORMATION

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

H319 – Causes serious eye irritation

H400 – Very toxic to aquatic life

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 10, 2023. UN Model Regulations Rev. 23 (2023). 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