

# Safety Data Sheet

## STEADFAST

SDS No: SDS450/000

Effective Date: 04/05/2022

Revision no: 000

Product Code: 450/000

### SECTION 1

#### COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

**Product Name: STEADFAST**

**Chemical Identifier: Potassium Nitrate & Sodium Octaborate.**

**Product Use:** Fertilizer

**Restrictions on use:** Agriculture

**Supplier:**

**In Line Trading 112 (Pty) Ltd. (Co. Reg. No. 2003/008663/07)**

Cedar Lake Industrial Estate,

C/O M57 & Porcelain Roads, Olifantsfontein, 1666, Gauteng, RSA

(011) 392 4072

**Telephone:**

**Website:**

[www.nutrico.co.za](http://www.nutrico.co.za)

**Emergency Contact Numbers**

Griffon Poison Information:

+27 82 446 8946

### SECTION 2

#### HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard Classes	Hazard Category	Hazard Statements Statement Code	Hazard Statement
Oxidizing solid	3	H272	May intensify fire, oxidizer
<b>Health</b>			
Acute toxicity (oral)	-	-	
Acute toxicity (dermal)	-	-	
Inhalation	-	-	
Skin irritation	-	-	
Eye irritation	-	-	
Reproductive	1B	H360FD	May damage fertility or the unborn child
STOT	-	-	
<b>Environmental</b>			
Aquatic	-	-	

**Label elements:** labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

**Hazard pictograms:**



**Signal word – Danger**

**Precautionary statements**

P273	Avoid release to the environment.
P280	Wear impervious rubber gloves and chemical safety goggles.
P302/352	IF ON SKIN: Wash with plenty of water and soap.
P310	Immediately call a POISON CENTRE.
P333/313	If skin irritation or rash occurs: Get medical advice.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local regulations

**Special labelling of certain mixtures:** None known

**Other hazards:** None known

**Toxicity:** Classification according to GHS: Not classified

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**SECTION 3**  
**COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance/Mixture:** Mixture

**Declared Active Ingredients:**

Chemical name	CAS No.	EC No.	Conc. %w/w	Classification Regulation (EC) 1272/2008
POTASSIUM NITRATE	7757-79-1		10-30	H272
SODIUM OCTABORATE	12280-03-4	234-541-0	<10	H360FD

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**SECTION 4**  
**FIRST AID MEASURES**

**INHALATION:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists.

**SKIN:** Flushing the skin with running water. If irritation persists, repeat rinse. Seek medical advice if required.

**EYES:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. If irritation persists, seek medical attention.

**INGESTION:** Rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink if the person is alert. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**IMPORTANT ACUTE EFFECTS:** May intensify fire, oxidizer.

**IMPORTANT DELAYED EFFECTS:** May damage fertility or the unborn child.

**NOTE TO PHYSICIAN:** This product contains Potassium Nitrate & Sodium Octaborate. Treat symptomatically and supportively

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**SECTION 5**  
**FIRE FIGHTING MEASURES**

<b>Suitable Extinguishing Media:</b>	Use carbon dioxide, dry chemical, water fog or foam.
<b>Unsuitable Extinguishing Media:</b>	High volume water jet. Use a water jet only to cool heated containers.
<b>Specific hazards:</b>	None
<b>Special Fire Fighting Procedures:</b>	Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Keep upwind. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways by run-off from the site
<b>Personal protective equipment:</b>	Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

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**SECTION 6**  
**ACCIDENTAL RELEASE MEASURES**

<b>PERSONAL PRECAUTIONS:</b>	Ventilate area of spill or leak. Ensure suitable personal protection during removal of spills. Wear eye protection, chemically resistant gloves, boots and coveralls.  Thermal decomposition can lead to the release of irrigating gases and vapors. Thermal decomposition generates: Nitrogen oxides
<b>CLEANING METHODS:</b>	Absorb spillages onto sand, earth or any suitable absorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washing must be prevented from entering surface water drains. Seal drums and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill remediation plan.
<b>DEACTIVATING CHEMICALS:</b>	None Known
<b>ADDITIONAL INFORMATION:</b>	Spillages or uncontrolled discharges into water sources must be alerted to the appropriate regulatory body.

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**SECTION 7**  
**HANDLING AND STORAGE**

**HANDLING**

**Precautions for safe handling:** Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

**STORAGE**

**Conditions for safe storage:** Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers

**Incompatible substances and mixtures:** None known

**Packaging material:** Foil Bag, 5 bags per box

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**SECTION 8**  
**EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Permissible concentration:** No occupational exposure limits have been determined for the significant ingredients in this product.

**ENGINEERING CONTROLS:** It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory Protection:** For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator

**Body Protection:** The use of chemically protective gloves is recommended to prevent against skin contact.

<b>Eye/ Protection:</b>	The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.
<b>Skin and Body Protection:</b>	Employee must wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.
<b>Body Protection:</b>	Complete suit protecting against chemicals, flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Emergency eyewash:</b>	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.

**SECTION 9**  
**PHYSICAL AND CHEMICAL PROPERTIES**

<b>Property</b>	<b>Value/description</b>	<b>Method</b>
Physical state	Powder	Visual
Colour	Cream white	Visual
Odour	Odourless	Organoleptic
pH (1% aqueous dilution)	6	CIPAC MT 75.3
Melting/Freezing point	Not Known	
Boiling point	Not applicable	
Flash point	Not applicable	
Flammability	Not applicable	
Vapour pressure	Not applicable	
Relative Vapour Density	Not applicable	
Density	1 g/mL @ (20°C)	Pycnometer
Solubility	Soluble in water	Sieve test
n-Octanol/Water partition coefficient	Not applicable	
Auto-ignition temperature	No data available	
Decomposition temperature	Not applicable	
Viscosity	Not applicable	
Explosive properties	Not explosive	
Oxidising properties	Oxidizing substance	

**SECTION 10**  
**STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.
<b>Reactivity:</b>	Stable and non-reactive under normal conditions

<b>Possibility of Hazardous Reactions:</b>	No data available
<b>Conditions to Avoid:</b>	Extreme heat or exposure to flames
<b>Incompatible Materials:</b>	Avoid contact with alkaline materials
<b>Hazardous Decomposition Products:</b>	If heated to the point of decomposition, oxides of phosphorus, oxides of nitrogen and ammonium (NH <sub>3</sub> ) maybe released.

**SECTION 11**  
**TOXICOLOGICAL INFORMATION**

**GHS Classification:** May damage fertility or the unborn child (H360)

Toxicity	Effective dose/ concentration	Value	Species	Method
Acute Oral	LD <sub>50</sub>	>5000 mg/kg	Rat	GHS ATE Calculation
Acute Dermal	LD <sub>50</sub>	>5000 mg/kg	Rat	
Acute Inhalation	Not classified as acute inhalation			
Skin irritation	Not classified as skin irritation			
Eye irritation	Not classified as an eye irritant			
Respiratory sensitization	Not classified as a respiratory or skin sensitizer.			
Mutagenicity/Genotoxicity:	Not classified as a germ cell mutagenic.			
Carcinogenicity	Not classified as a carcinogen.			
Reproductive toxicity	Rat & Mouse have demonstrated increased toxicity- Sodium Octaborate			
Specific target organ toxicity:	Not classified as a specific target organ toxicant			
Chronic effects	No known chronic effect			

**SECTION 12**  
**ECOLOGICAL INFORMATION**

**GHS Classification:** The product is not classified as an environmental Hazard

Toxicity	Effect dose/ concentration	Value	Test duration	Species	Method
<b>Aquatic</b>					
Fish	LC <sub>50</sub>	1060mg/L	96 h	<i>Lepomis macrochirus</i>	OECD 203
Algae	EC <sub>50</sub>	>2500 mg/L	72 H	<i>Algae</i>	-
<b>Terrestrial</b>					
Bees	LD <sub>50</sub> (Oral)	Not data	-	<i>Apis spp</i>	OECD 214
Earthworms	NOEC	Available		<i>Eisenia Foetida</i>	OECD 207

**ENVIRONMENTAL EFFECTS**

<b>Persistence and degradability:</b>	Soluble in water Persistence is unlikely based on information available.
<b>Bio-accumulative Potential:</b>	No information available
<b>Mobility in soil:</b>	Will likely be mobile in the environment due to its water solubility
<b>Other adverse effects:</b>	No known adverse effects

**SECTION 13**  
**DISPOSAL CONSIDERATIONS**

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**Waste:** Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

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**SECTION 14**  
**TRANSPORT INFORMATION**

**UN Number:** 1486

**Road Transport ADR/IRD:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Potassium Nitrate

**Maritime Transport IMDG/IMO:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Potassium Nitrate

Marine Pollutant (Y/N): No

**Air Transport IATA/ICAO:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Potassium Nitrate

**Special/Environmental Precautions:** The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**Transport in bulk :** Not applicable

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**SECTION 15**  
**REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation for the mixture:** OHS 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions :** None

**EU regulation:** Regulation EC1272/2008

**Other national regulations:** None

**Chemical Safety Assessment carried out?** No

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**SECTION 16**  
**OTHER INFORMATION**

**PACKAGING:**

Packed in 5kg foil bag, 5 bags per box and labelled according to South African regulations and guidelines.

**DISCLAIMER:**

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.