Safety Data Sheet

PEKAN-NI-NI WSP
SDS No: SDS090/000
Effective Date: 18/11/2021
Revision no: 000
Product Code: 423

SECTION 1
COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

Product Name: PEKAN-NI-NI WSP
Chemical Identifier: BORIC ACID, NICKEL SULPHATE
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
Telephone: (011) 392 4072
Website: 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 Statement code	Hazard Statement
Health			
Acute toxicity (oral)	4	H302	Harmful if swallowed
Acute toxicity (dermal)			
Inhalation			
Skin irritation	2	H315	Causes skin irritation
Eye irritation	1	H318	Causes serious eye damage
Skin sensitisation	1B	H317	May causes an allergic skin reaction
Respiratory sensitiser	1	H334	May causes allergy or asthma symptoms or breathing difficulties if inhaled
Germ Cell mutagenicity	2	H341	Suspected of causing genetic defects
Reproductive	1B	H360FD	May damage fertility. May damage unborn child
Carcinogenicity	1A	H350	May cause cancer
STOT SE	1	H370	Causes damage to organs
Environmental			
Aquatic (Acute)	1	H400	Very toxic to aquatic life
Aquatic (Chronic)	1	H410	Very toxic to aquatic life with long lasting effects

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

Hazard pictograms

Signal word – Danger

Hazard statements

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H317	May causes an allergic skin reaction
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341	Suspected of causing genetic defects
H360FD	May damage fertility. May damage unborn child
H350	May cause cancer
H370	Causes damage to organs
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P260	Do not breath dust/fume/gas/mist/vapour/spray
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.
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: 4

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
NICKEL SULPHATE	10101-97-0		>10	H302, H318, H315, H317, H334, H341, H370, H350, H360FD, H400, H410
BORIC ACID	10043-35-3		<10	H360FD

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: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

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:
Harmful if swallowed
Causes skin irritation
Causes serious eye damage
May causes an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing genetic defects
May damage fertility. May damage unborn child
May cause cancer
Causes damage to organs
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

IMPORTANT DELAYED EFFECTS: Very toxic to aquatic life with long lasting effects

NOTE TO PHYSICIAN: This product contains Nickel Sulphate, Boric acid and Zinc Sulphate. Treat symptomatically and supportively.

SECTION 5
FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide, dry chemical, water fog or foam.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Not applicable

Special Fire Fighting Procedures: 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

Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

SECTION 6
ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be Toxic to aquatic organisms and causes long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.

Methods & Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods & Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

SECTION 7
HANDLING AND STORAGE

HANDLING

Precautions for safe handling: Avoid contact with skin and eyes. 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: Wash hands and contacted areas with water when done.

STORAGE

Conditions for safe storage: Store in a dry, cool place

Incompatible substances and mixtures: Strong oxidizing agents

Packaging material: 3kg Foil bag, bags are packed 10 per box

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.

Eye/ Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employee must wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

Body Protection: 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.

Emergency eyewash: 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

Property	Value/description	Method
Physical state	Powder	Visual
Colour	Cream-white	Visual
Odour	Odourless	Organoleptic
pH (1% aqueous dilution)	5.4 – 5.9	CIPAC MT 75.3

Melting/Freezing point	Not applicable	
Boiling point	Not applicable	
Flash point	Not applicable	
Flammability	Not applicable	
Vapour pressure	Not applicable	
Relative Vapour Density	Not applicable	
Density	0.950 – 1.050 g/mL	Pycnometer
Solubility	Soluble in water	Sieve analysis
n-Octanol/Water partition coefficient	Not applicable	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Viscosity	Not applicable	
Explosive properties	Not explosive	
Oxidising properties	Not oxidative	

SECTION 10
STABILITY AND REACTIVITY

Chemical Stability: 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.

Reactivity: The product is stable and non-reactive under normal conditions

Possibility of Hazardous Reactions: No data available

Conditions to Avoid: Extreme heat or exposure to flames

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: None known

SECTION 11
TOXICOLOGICAL INFORMATION

GHS classification: Harmful if swallowed (H302)
Causes skin irritation (H316)
Causes serious eye damage (H318)
May causes an allergic skin reaction (H317)
May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334)
Suspected of causing genetic defects (H341)
May damage fertility. May damage unborn child (H360FD)
Cause cancer (H350)
Causes damage to organs (H370)

Toxicity	Effective dose/ concentration	Value	Species	Method/Source
Acute Oral	LD_{50}	1424mg/kg	Rat	ATE Calculation
Acute Dermal	Not classified as an acute dermal/inhalation toxicant			
Acute Inhalation				
Skin irritation	Causes skin irritation			
Eye damage	Causes serious eye damage			
Skin sensitization	May causes an allergic skin reaction			
Respiratory sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled			
Mutagenicity/Genotoxicity:	Suspected of causing genetic defects			

Carcinogenicity	May cause cancer
Reproductive toxicity	May damage fertility. May damage unborn child
Single target organ toxicity:	Causes damage to organs
Chronic effects (e.g developmental)	May cause long lasting harmful effects

SECTION 12
ECOLOGICAL INFORMATION

GHS classification: Very toxic to aquatic life (H400)
Very toxic to aquatic life with long lasting effects (H410)

Toxicity	Effect dose/ concentration	Value	Test duration	Species	Source
Aquatic					
Fish	LC_{50}	820 µg/L	96 h	-	ECHA
Aquatic invertebrates	EC_{50}	360 µg/L	48 h	-	ECHA

ENVIRONMENTAL EFFECTS

Persistence and degradability: Not applicable to inorganic substances

Bio-accumulative Potential: BCF=0.002, therefore, it is not considered to be bio-accumulative

Mobility in soil: Disassociates into ions

Other adverse effects: None known

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.

SECTION 14
TRANSPORT INFORMATION

UN Number: 3077

Road Transport ADR/IRD:
Class: 9
Packaging group: III
UN Proper Shipping Name: Hazardous Substance,

Maritime Transport IMDG/IMO:
Class: 9
Packaging group: III
UN Proper Shipping Name: Hazardous Substance,
Marine Pollutant (Y/N): Yes

Air Transport IATA/ICAO:
Class: 9
Packaging group: III
UN Proper Shipping Name: Hazardous Substance,

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

SECTION 15
REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture: OHSA 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

SECTION 16
OTHER INFORMATION

PACKAGING: 3kg Foil bag, bags are packed 10 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.