

MATERIAL SAFETY DATA SHEET

Nutri-Key Shuttle Seven™

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product NameNutri-Key Shuttle Seven™
Chemical NameNot applicable.
Other Name/s Not applicable.
Supplier.....Zylem CC
P.O. Box 13736, Cascades, 3202
South Africa
Telephone Number.....+27 33 3472893
E-mail.....admin@zylemsa.co.za
Websitewww.zylemsa.co.za
Emergency telephone No.....+27 83 264 6816

Emergency Contact

Police.....10111
For emergency response.....1022
Poison Information Centre.....0800 333 444

Recommended Use.....Fertiliser

2. HAZARDS IDENTIFICATION

GHS Classification

Serious eye damage – Category 1
Skin irritation – Category 3
Reproductive toxicity – Category 1B
Hazardous to the aquatic environment – Category 2

GHS Label Elements

Signal Word: DANGER

Hazard Statements:

H318 Causes serious eye damage
H316 Causes mild skin irritation
H360 May damage fertility or the unborn child
H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 + P281 Wear eye/face protection, protective gloves and use other personal protective equipment as required.
P264 Wash hands thoroughly after handling
P273 Avoid release to the environment

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Response:

P305 + P351+

P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 If skin irritation occurs: Get medical advice

P362 Take off contaminated clothing and wash before re-use.

P308 + P313 If exposed or concerned get medical advice.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Proportion</i>
Copper sulfate	7758-98-7	<10%
Iron sulfate	7720-78-7	<10%
Zinc sulfate	7446-19-7	<10%
Disodium octaborate tetrahydrate	7720-78-7	<1%
Non-hazardous proprietary mix of additional trace elements and other fertiliser ingredients	N/A	100%

4. FIRST AID MEASURES

Eye Contact.....Immediately rinse with plenty of water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water, if irritation persists contact a physician.

Inhalation.....Remove to fresh air. Get medical attention if irritation occurs or breathing difficulty develops.

Ingestion.....Rinse mouth with water (if patient is conscious) and consult a physician or call the poisons information centre.

Skin Contact.....Remove contaminated clothing and wash with soap and water. If symptoms such as redness or irritation occur, consult a physician. Launder clothes before re-use.

Recommended First Aid Facilities.....Eye wash station and normal washing facilities.

Advice to Physician.....Treat symptomatically.

General Information.....N/A

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5. FIRE FIGHTING MEASURES

Flammability..... Non-flammable and non-combustible. May decompose on heating to emit harmful vapours. Fire fighters recommended to wear SCBA.

Extinguishing Media.....Use extinguishing media suitable for surrounding fire situations.

Hazchem Code.....Not applicable.

Precautions in connection with fire..Wear SCBA and contain run-off to prevent entry in water or drainage systems.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures.....Contain spill, do not discharge waste liquid into streams or waterways. Use personal protective equipment as outlined in Section 8.

Methods and Material for Containment and clean up.....Wear protective clothing when cleaning up major spills, do not contaminate streams or waterways. Wipe up with inert materials and place in labelled containers for waste disposal. Dispose of in compliance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling.....Avoid contact with eyes, do not inhale spray mist. It is recommended to wear personal protective equipment as outlined in Section 8. Prohibit eating, drinking and smoking in contaminated areas.

Storage.....Keep out of reach of children. Store in a cool, dry area in a sealed container. Do not store in prolonged sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards.....None established .

Biological Limit Values.....None established.

Engineering Controls.....Ensure sufficient ventilation to minimise exposure.

Personal Protective Equipment.....The following protective equipment is recommended when handling this product: safety glasses with side shields or a face shield complying with national standards; gloves of an impervious material conforming to national standards, rubber boots, overalls, plastic apron. Suitable respiratory equipment (e.g. disposable fume mask conforming to national standards) is required when spray mist is present.

Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking and going to the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance.....Brown liquid.

Odour.....Slight odour.

pH.....Approx. 5.7

Vapour Pressure.....No data available.

Vapour Density.....No data available.

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Boiling Point.....No data available.
Solubility in Water.....Fully miscible.
Lower Explosion Limit.....No data available.
Upper Explosion Limit.....No data available.
Conductivity.....45 – 65 mS/cm
Melting PointNo data available
Evaporation Rate.....No data available
Specific Gravity.....Approx. 1.27
Flammability.....Not combustible.

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use.
Hazardous reactions &
Materials to avoid Avoid extreme heat, flames and ignition sources. Hazardous polymerization will not occur.
Hazardous decomposition
Products Possible oxides of sulfur may be released.

11. TOXICOLOGICAL INFORMATION

Acute toxicity No LD₅₀ data available for this product. Iron sulfate tetrahydrate LD₅₀ (oral, mouse) 1520 mg/kg; copper sulfate LD₅₀ (oral, rat) 300 mg/kg; zinc sulfate LD₅₀ (oral, rat) 2150 mg/kg.
Skin No data available. May cause irritation, wash with soap and water.
Eye No data available. Causes eye damage, wash immediately with water.
Respiratory or skin sensitisation No data available
Germ cell mutagenicity No data available
Carcinogenicity No data available
Reproductive toxicity No data available
Specific Target Organ Toxicity (STOT) Single exposure No data available
Specific Target Organ Toxicity (STOT) Repeated exposure No data available
Aspiration Hazard No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity.....No data available.
Persistence and degradability.....No data available.
Mobility.....No data available.
Environmental Protection.....No data available.
Other Adverse EffectsToxic to aquatic life with long lasting effects

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers.....When possible, product should be used for its intended purpose including the rinsing of the container. Dispose of in accordance with all local, state and national regulations. Do not discard into drains or waterways.

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Container.....Triple or preferably pressure rinse containers before disposal. Recycle containers if possible (replace cap and return cleaned container to recyclers or collection point). Dispose of used containers in accordance with all local and national regulations. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Hazchem Code.....This product is not labelled as a dangerous good and therefore does not have any special transport conditions.

15. REGULATORY INFORMATION

Not Applicable.

16. OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

Acronyms

CAS number.....Chemical Abstracts Service Registry Number.

GHS.....Globally Harmonised System of Classification and Labelling of Chemicals

Hazchem Code.....Emergency action code of numbers and letters that provide information to emergency services especially firefighters.

IARC.....Internationally Agency for Research on Cancer.

NOSA.....National Occupational Safety Association. If large quantities are ingested, seek medical advice.

NOS.....Not otherwise specified.

NTP.....National Toxicology Program (USA)

R-Phrase.....Risk Phrase

UN Number.....United Nations Number

SUSMP.....Standard for the Uniform Scheduling of Medicines and Poisons.

STEL.....Short Term Exposure Limit

TWA.....Time Weighted Average (the average airborne concentration when calculated over a normal 8-hour working day for five days a week)

LD₅₀.....Lethal Dose for 50% Mortality

Disclaimer

The data and recommendations presented herein are based upon research of others and are believed to be accurate. However, no warranty is expressed or implied regarding the use of this data or the results to be obtained from use thereof. Zylem CC assumes no responsibility for the injury to customers or third party proximity caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet.

END OF MSDS