



Material Safety Data Sheet for

NPK 18-18-5

Based on available information, not classified as hazardous according to criteria of NOHSC.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER Product Name: NPK 18-18-5 (Granular Fertilizer)

Supplier: K plus S Middle East FZE DMCC

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product Description: NPK 18-18-5 (Granular Fertilizer)

Components / Proportion Risk Phrases

Homogeneous mixing of different source of Nitrogen, Phosphorous Potassium and EDTA chelated Micronutrient Iron, Zinc, Copper, and Manganese. Boric acid as source of Boron is also added.

Nonhazardous component(s) 100%

3. HAZARDS IDENTIFICATION

Poisons Schedule: None allocated.

4. FIRST AID MEASURES

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact: If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible Pre-caution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek medical assistance. Seek medical advice.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Specific Hazards: Non-combustible material.

Fire-fighting advice: Non-combustible material. Decomposes on heating emitting toxic fumes, including those of ammonia and oxides of nitrogen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Handling advice: Avoid skin and eye contact and breathing in dust.

Storage advice: Store in a cool, dry, well ventilated place and out of direct sunlight. High stacking should be avoided as pressure tends to promote caking. Keep away from fungicides and herbicides. This product when stored in a confined, unventilated space/hold can give off ammonia or other odour and lead to the depletion of oxygen within this space and other confined spaces. It is therefore essential that ventilation is carried out prior to entry to all ship holds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission. However,

Exposure Standard(s) for constituent(s):

Nuisance dust: 8hr TWA = 10 mg/m³

As published by the National Occupational Health and Safety Commission.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Control Measures:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

Personal Protective Equipment: Orica Personal Protection Guide No. 1, 1998: E - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUSTMASK. Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Flash Point: Not Available

Flammable/Explosive Limits (%): LEL/UEL— Not applicable

Auto ignition Temperature: Not applicable

Appearance: Reddish brown granular form

Physical State: solid

Odor/Taste: Odorless

Molecular Weight of Pure Material: N.A

pH: 5-6 (1% aq. Solution)



Vapor Pressure (mm Hg): Approx. 0

Vapor Density (air=1): N.A

Boiling Point: Not Available.

Melting Point: Not Available.

Solubility in Water: Soluble in water partly

Specific Gravity (water=1): N.A

Volatility: Not Available

Bulk Density: Not Available

10. STABILITY AND REACTIVITY

Stability: Product is stable for at least 2 years under ambient storage conditions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however large amounts may cause nausea and vomiting.

Eye contact: May be an eye irritant.

Skin contact: Repeated or prolonged skin contact may lead to irritation.

Inhalation: Breathing in dust may result in respiratory irritation.

Long Term Effects:

No information available for the product.

Toxicological Data:

LD50 (Oral, Rat): N.A.

12. ECOTOXICOLOGICAL INFORMATION

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Refer to Waste Management Authority.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Classification: Based on available information, not classified as hazardous according to criteria of NOHSC.

Poisons Schedule: None allocated

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).



16. OTHER INFORMATION

This MSDS summarizes to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since K plus S Middle East FZE DMCC cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact their BD representative at the contact details on page 1. K plus S Middle East FZE DMCC responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.