PRODUCT NAME: Red Roc Booster Powder  
UN Number: None Allocated  
HazChem Code: None Allocated  
Dangerous Goods Class & Sub-Risk: None Allocated  
Poisons Schedule: None Allocated  
Australian Harmonized Export Commodity Classification (AHECC): 2530 9093, “Other Types of Rock Media”

IDENTIFICATION  
Product Form: Fine pink powder  
Origin: Hard Rock Natural Ash Fall Tuff Deposit.  
Minerals Present: Main - Mordenite, Clinoptilolite  
Minor - Quartz, Feldspar, Montmorillonite.  
Composition: Sodium/Potassium/Calcium Alumino-silicates.  
Product Size: Finer than 85% minus 76 micron.  
Particle Shape: Cubic to Blocky.  
Bulk Density: Circa 900 kilograms/cubic metre.

CHEMICAL CHARACTERISTICS  
Chemical Formula: Typically $(Na,K)_6(Al_6Si_{30}O_72).20H_2O$ to $Na_3KCa_2(Al_8Si_{40}O_{96}).28H_2O$.  
Chemical Stability: Excellent.  
Melting Point: $+1000^\circ$C (may tend to froth and bubble at temperatures in excess of $200^\circ$C).  
Solubility in Water: Virtually Insoluble. Slurries readily with water.  
Vapour Pressure: Not Applicable.  
Vapour Density: Not Applicable.  
Volatiles: Nil.  
Flash Point: Not Applicable.  
Flammability: Non-flammable.  
Explosive Limits: Non-explosive.  
Auto ignition Temp: Not Applicable.  
Form: Powdered Solid.

HEALTH HAZARD INFORMATION  
Human Contact  
Eyes: Very prolonged contact in high dust area may cause some irritation.  
Skin: Prolonged contact may cause some irritation due to drying action.  
Inhalation: No known effects, however, product is a fine dust and lung injury (silicosis) could be possible from excessive inhalation over an extended period.  
Swallowed: No known adverse affects. Product is used as animal feed supplement however it is not recommended for human consumption.
HEALTH HAZARD INFORMATION (Continued)

Precautions

Eyes: Wear protective goggles if intrusion into high dust area is necessary.

Skin: Wash hands with soap and water. Use suitable skin protection cream.

Inhalation: Avoid dusty areas unless wearing suitable respirator. Stand on windward side of any temporary spills.

Swallowed: Wash hands well with detergent and water before consumption of food. Do not use as a medicine.

First Aid

Eyes: Flush with clean water for 5 to 10 minutes. If irritation persists seek immediate medical attention.

Skin: Wash affected area with soap and water and apply suitable skin protection cream. If irritation or rash persists seek medical advice.

Inhalation: Remove patient from affected area. Seek medical advice if symptoms persist.

Swallowed: If adverse effects occur seek medical advice.

Advice to Doctor

Base Material is non-toxic and chemically inert. It is however highly absorbent and could have a dehydrating effect if large amounts are ingested rapidly.

Electron photomicrographs have shown that particle shape is generally blocky and sub-rounded rather than sharp and shardy. Implications are that inhaled material would be less irritant than silica dust.

Precautions for Use

Exposure Limits: Crystalline alumino-silicate that could be classified as a nuisance dust with an exposure standard of 10mg/m³ (same as Type GP Cement).

Engineering Controls: Use suitable means of dust collection/suppression so that airborne dust limits do not exceed the exposure limits. If respirable dust levels exceed industrial limit, use respirators suitable for inert crystalline dust.

Personal Protection:
Avoid prolonged breathing of dust or prolonged contact of dust with skin. Persons with a history of respiratory illness or reduced pulmonary function should avoid areas with high dust levels.

Flammability
No applicable.

Environment
Other than respirable dust limitations no environmental hazards are known for this zeolite.

SAFE HANDLING INFORMATION

Storage and Transport
ROAD TRANSPORT: Not classified as a Dangerous Goods
SEA TRANSPORT: Not classified.
STORAGE: Protect from moisture.

Packaging and Labelling
No special requirements other than to prevent dust emission.

Spills and Disposal
Avoid excessive exposure to dust. If dust grade material is spilt use respirator during dry clean up or alternatively hose down with water.

Reactivate Data
Will react with HF acid. Possible mild reaction during contact with very strong oxidising agents.

Fire/Explosion Hazard
Non flammable and non explosive.

*No warranty express or implied is made. This Product Safety Data Sheet is not a substitute for expert advice of development of engineering and safe handling practise.*

October 2015