



A.C.N. 000 038 497 ABN: 61 000 038 497

**Head Office  
Mine & Processing**

Escott Road  
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## ESCOTT NATURAL ZEOLITE

APPEARANCE:	Light pink powder or granulated chips
PACKAGING	20kg paper sacks (Z3RP20), 1 tonne Bulker bags (Z3RPBB)
COMPOSITION:	Contains tabular clinoptilolite (zeolite) crystals as the main crystalline content. Minor components are quartz, mordenite (zeolite) clay (smectite) and mica.
SOURCE:	Escott property, Werris Creek, northern New South Wales.
CHEMISTRY:	Full major and trace element analysis is available on request.
AGE:	Late Carboniferous, 302 4 million years.
MINERAL GROUP:	Hydrous aluminosilicate.
HARDNESS:	7 Mohs
DENSITY:	1.1-1.6 tonnes/m <sup>3</sup>
AMMONIA ODOUR	160 m.eq./100g (NH <sub>3</sub> gas absorbed by 0.5g sample at "standard"
ABSORPTION:	conditions in a moist atmosphere)
LOSS ON	12.5 Wt% at 800 C for 2 hours
IGNITION:	
PARTICLE	From 75 micron powder to 6mm chips
DIAMETER:	
STABILITY:	Stable down to acid pH 2; temperatures up to 400 C.
MOLECULAR	7.9 x 3.5 angstroms, 4.4 x 3.0 angstroms from clinoptilolite.
CHANNEL SIZE:	
AMMONIUM ION	104 m.eq/100g
EXCHANGE	
CAPACITY:	
CATION	Na 12
EXCHANGE	K 4
CAPACITY <sup>(2)</sup> :	Ca 85
	Mg 18
SELECTIVITY	Cs>K>Sr=Ba>C>Na>Li
SEQUENCE <sup>(3)</sup>	Ca>Rb>K>Na>Sn>Li
(typical for	Rb>NH <sub>4</sub> >Ba>Sr>Na>Ca>Fe>Al>Mg>Li
clinoptilolite):	Cs>NH <sub>4</sub> >Na
	Pb>Ag>Cd=Zn=Cu>Na
	Ba>Pb>Cd>Zn>Cu>Na
SAFETY:	Non toxic, non combustible and insoluble (H <sub>2</sub> O). In conditions where dust is generated a non-toxic dust respirator should be worn.

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B.Sc(Hon), M.Aus.I.M.M., M.A.A.P.G.  
PROJECT GEOLOGIST

- Notes:
1. Information on Escott Natural Zeolite remains the property of Zeolite Australia Limited and cannot be used without written authority.
  2. Exchange capacity depends on sample pretreatment and analytical method used. Zeolite Australia Limited uses methods outlined by N.S.W. Geological Survey (Fredrickson, 1986), values are for cations released from natural state Z3 during NH<sub>4</sub><sup>+</sup> exchange.
  3. Sequence is generalised. Actual selectivity and exchange capacity for specific ions should be determined by tests with actual solutions to be used/treated.
  4. While technical data is presented as accurately as possible, being a natural product some variation is possible. Users should determine by independent testing suitability of product for particular uses.



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## **Zeolite Standard Sizes**

Our standard sizes are.

<10 micron powder	Specialty suspensions
<75 micron powder	Animal Feeds, Pellets, Urea buffering / coating Organic fertiliser pellets, Flocculation of water, Aquaculture
<0.5mm	Animal Feeds, Pellets, Urea buffering / coating Organic fertiliser pellets
0.5-1.6mm	Turf
0.5-2mm	Agriculture & Horticulture, Fertiliser blending for banding & spreading, fertiliser carrier, potting mixes & composts. Aquaculture pond base
0.5-2mm	Filter Grade double screened
2-6mm	Agriculture & Horticulture, Fertiliser blending for banding & spreading, fertiliser carrier, potting mixes & composts