ZEOLITE AUSTRALIA P/L

Werris Creek
Mine & Processing

Escott Road
PO Box 6
Werris Creek N.S.W. 2341

Phone: (02) 6768-7080
Fax: (02) 6768-7764
Email: office@zeolite.com.au

Melbourne
Michael Wood B. Comm. Grad. Dip. App. Sci. (Hort.)

Marketing Manager
Agricultural & Horticultural

25 Ardrie Road
Malvern East, Vic. 3145

Mobile: 042 901 9011
Email: mwood@zeolite.com.au

ESCOTT NATURAL ZEOLITE

*	APPEARANCE:	Light pink powder or granulated chips
*	PACKAGING	20kg paper sacks , 25 Kg Bags, 1 tonne Bulker bags
*	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^3
*	AMMONIA ODOUR ABSORPTION:	160 m.eq./100g (NH_3 gas absorbed by 0.5g sample at "standard" conditions in a moist atmosphere)
*	LOSS ON IGNITION:	12.5 Wt% at 800°C for 2 hours
*	PARTICLE DIAMETER:	From 75 micron powder to 6mm chips
*	STABILITY:	Stable down to acid pH 2; temperatures up to 400°C.
*	MOLECULAR CHANNEL SIZE:	7.9 x 3.5 angstroms, 4.4 x 3.0 angstroms from clinoptilolite.
*	AMMONIUM ION EXCHANGE CAPACITY:	104 m.eq/100g
*	CATION EXCHANGE CAPACITY[2]:	Na 12 K 4 Ca 85 Mg 18 TOTAL 119 m.eq./100g
*	SELECTIVITY SEQUENCE[3] (typical for clinoptilolite):	Cs>K>Sr=Ba>C>Na>Li Ca>Rb>K>Na>Sn>Li Rb>NH_4>Ba>Sr>Na>Ca>Fe>Al>Mg>Li Cs>NH_4>Na Pb>Ag>Cd=Zn=Cu>Na Ba>Pb>Cd>Zn>Cu>Na
*	SAFETY:	Non toxic, non combustible and insoluble (H_2O). In conditions where dust is generated a non-toxic dust respirator should be worn.

STEVEN COOPER
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_4^+ 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.