

FOOD GRADE DIATOMACEOUS EARTH, EXTRA PURE, PERU

CHEMICAL COMPOSITION

	Mean chemical composition of 4 3x3mm areas of the polished surface ^{Note 1}
SiO ₂	94.2
TiO ₂	0.2
Al ₂ O ₃	2.5
Fe ₂ O ₃	0.9
Mn_2O_3	0.1
MgO	0.3
CaO	0.5
Na ₂ O	0.2
K ₂ O	0.4
SO ₃	0.4
P_2O_5	0.3

Note 1: The analyses are in weight %, are normalised to 100% and exclude CO_2 and H_2O .

3.1 *Electron photomicrographs illustrating the texture and particle size of the sample.*

Figure 1 (14438)

Scale: The scale bar represents 50 micrometres.

Secondary electron image of a gold-coated broken surface of the sample.



WATER ABSORPTION, OIL ABSORPTION, POROSITY LOSS ON IGNITION AND DENSITY TESTING

Date of test	Test / test method	Result
19/05/2004	Moisture content - % by mass of sample dried at 105 degrees C (BS 1377 method)	8.3% Note 1
20/05/2004	Specific gravity (BS 1377 method)	1.99 Note 2
21/05/2004	Apparent particle density (BS 812 method)	2.18 Mg/m ³ Note 3
21/05/2004	Water absorption - % by mass water absorption with respect to oven dry weight (BS 812 method)	90.9%
21/05/2004	Capillary porosity – Vacuum saturated water absorption as a % of oven dry weight (BS 1881, Part 124)	88.2%
26/05/2004	Loss on ignition at 925 degrees C	3.34% Note 4
21/05/2004	Porosity - Volume of pore space expressed as a % of the volume of the sample (BRE Digest 141 method)	64.5%
21/05/2004	Oil absorption after 30 minutes immersion - % by mass of Sample dried at 105 degrees C Note 5	58.0%
24/05/2004	Oil absorption after 72 hours immersion - % by mass of Sample dried at 105 degrees C ^{Note 5}	66.3%