



B R E N N - O - K E M

P.O. Box 11
Walsley
6830
South Africa

Grape seed extract - Condensed tannins

Description:

Condensed tannins extracted from grape seeds

Applications in winemaking (red wines):

- clarification and increase protein stability
- improves structure, enhances aging potential
- stabilize wine colour
- antioxidant

Dosage recommendation:

- 10 to 30 g/Hl during alcoholic fermentation
- 5 to 10 g/Hl in wine before final filtration

Chemical Classification

100% Natural extract from *Vitis vinifera*

Physical appearance

Fine Reddish Brown Powder

Colour

Reddish Brown

Odor

Characteristic Tannin

Taste

Astringent

Batch nr. : GSE500206

Analysis:

	<u>Specification:</u>	<u>Result:</u>
%Moisture	< 5%	4.7%
Ash content	< 8%	5.7%
Total polyphenols (gallic acid equivalent) Folin method	> 50%	53.3%

Heavy metals:

Arsenic (As)	< 3 ppm	Complies
Cadmium (Cd)	< 1 ppm	Complies
Lead (Pb)	< 10 ppm	Complies
Mercury (Hg)	< 1 ppm	Complies

Microbiology:

Total Plate count (CFU/g)	< 1000	Complies
Coliforms (CFU/g)	< 5	Complies
Yeast and Mould (CFU/g)	< 100	Complies
Escherichia coli	0	No growth
Salmonella	0	Absent
Staphylococcus aureus	0	No growth

Signature

Date

R. Genade

22 October 2007

For Brenn-O-Kem (Pty) Ltd