

REPORT ON SAMPLE OF LIME

FILE NO : 2510193440

DATE ISSUED : 30/10/2025

KAVANAGH EXCAVATION & PLUMBING P/L
ATT: EMMA KAVANAGH
P O BOX 552
WARRNAMBOOL, VIC 3280

CLIENT ID : KAV003
PHONE :

SAMPLE ID : LIME
ANALYSIS REQUIRED : Lime quality

DATE RECEIVED : 23/10/2025

ITEMS	ABBREVIATION	UNIT	RESULTS
Results of analysis on sample on dry weight basis:			
pH (1:5 Water)			9.1
Electrical Conductivity	EC	µS/cm	258
TOTAL CALCIUM	Ca	%	34.92
TOTAL MAGNESIUM	Mg	%	1.83
TOTAL SODIUM	Na	%	0.206
CALCIUM CARBONATE	CaCO ₃	%	87.3
	(Calculated from Total Calcium)		
MAGNESIUM CARBONATE	MgCO ₃	%	6.4
	(Calculated from Total Magnesium)		
MOISTURE CONTENT	MC	%	4.84
MATERIAL > 2mm		%	0.175
MATERIAL 1.00 - 2.00 mm		%	0.362
MATERIAL 0.85 - 1.00 mm		%	0.536
MATERIAL 0.30 - 0.85 mm		%	75.2
MATERIAL 0.075 - 0.30 mm		%	23.8
MATERIAL < 0.075mm		%	Nil
NEUTRALISING VALUE	NV	%	94.9
EFFECTIVE NEUTRALISING VALUE	ENV	%	65.51

Notes on Neutralising Value

Neutralising Value is a measure of the amount of acidity a material can neutralise, or in the case of lime, its total limiting value. An approximation of Neutralising Value can be made by $\text{CaCO}_3 + (2.5 \times \text{MgO})$.

Effective Neutralising Value is a calculated adjustment of the Neutralising Value, using the fineness of the lime. Lime retained on an 850 µm sieve (the coarser fraction) is estimated to be only 10% effective (fully utilised in the short term). Lime in the 300-850 µm sieve range (medium sized fraction) is estimated to be only 60% effective, while lime passing the 300 µm sieve (finer fraction) is estimated to be 100% effective.

Where a lime has a low Effective Neutralising Value (due to a high proportion of coarse fraction), further grinding should increase its effectiveness to change the pH.