



**BUREAU
VERITAS**

MA370 & MA270

Package Description	Multi acid digestion
Sample Digestion	HF-HNO ₃ -HClO ₄ acid digestion
Instrumentation Method	ICP-ES (MA370, MA270), ICP-MS (MA270)
Legacy Code	7TD, 7TX
Applicability	Rock and Drill Core

METHOD DESCRIPTION

0.5g sample split is digested to complete dryness with an acid solution of H₂O-HF-HClO₄-HNO₃. 50% HCl is added to the residue and heated using a mixing hot block. After cooling the solutions are made up to volume with dilute HCl in class A volumetric flasks. Sample split of 0.1g may be necessary for very high-grade samples to accommodate analysis up to 100% upper limit.

Element	MA370 Detection	MA270 Detection	Upper Limits	Element	MA370 Detection	MA270 Detection	Upper Limits
Ag	2 g/t	0.5 ppm	300 g/t	P	0.01%	0.01%	
Al*	0.01%	0.01%		Pb	0.02%	0.5 ppm	10%
As	0.02%	5 ppm		Rb	-	0.5 ppm	
Ba*	-	5 ppm		S*	0.05%	0.05%	
Be	-	5 ppm		Sb	0.01%	0.5 ppm	
Bi	0.01%	0.5 ppm		Sc	-	1 ppm	
Ca*	0.01%	0.01%		Sn*	-	0.5 ppm	
Cd	0.001%	0.5 ppm		Sr	0.01%	5 ppm	
Ce	-	5 ppm		Ta*	-	0.5 ppm	
Co	0.001%	1 ppm		Th	-	0.5 ppm	
Cr*	0.001%	1 ppm		Ti*	-	0.001%	
Cu	0.001%	0.5 ppm		U	-	0.5 ppm	
Fe*	0.01%	0.01%		V	-	10 ppm	
Hf*	-	0.5 ppm		W*	0.01%	0.5 ppm	
K	0.01%	0.01%		Y	-	0.5 ppm	
La	-	0.5 ppm		Zn	0.01%	5 ppm	40%
Li	-	0.5 ppm		Zr*	-	0.5 ppm	
Mg	0.01%	0.01%					
Mn*	0.01%	5 ppm					
Mo	0.001%	0.5 ppm					
Na	0.01%	0.01%					
Nb*	-	0.5 ppm					
Ni	0.001%	0.5 ppm					

Limitations:

*This digestion is only partial for some Cr and Ba minerals and some oxides of Al, Fe, Hf, Mn, Nb, S, Sn, Ta, Ti, W and Zr if refractory minerals are present.