

ISO 12103-1 Arizona Test Dust

ISO TEST DUST CONTAMINANTS			
TYPICAL CHEMICAL ANALYSIS			
Chemical	% of Weight	Chemical	% of Weight
SiO ₂	69.0 - 77.0	CaO	2.5 - 5.5
Al ₂ O ₃	8.0 - 14.0	MgO	1.0 - 2.0
Fe ₂ O ₃	4.0 - 7.0	TiO ₂	0.0 - 1.0
Na ₂ O	1.0 - 4.0	K ₂ O	2.0 - 5.0
* Loss on Ignition 2 - 5			

Particle Size Distribution by Volume, %				
Size μ	A1 Ultrafine	A2 Fine	A3 Medium	A4 Coarse
0.97	3.0 to 5.0	4.5 to 5.5	2.0 to 2.4	0.74 to 0.83
1.38	7.0 to 10.0	8.0 to 9.5	3.8 to 4.4	1.8 to 2.1
2.75	23.0 to 27.0	21.3 to 23.3	10.3 to 11.1	5.5 to 6.3
5.50	65.0 to 69.0	39.5 to 42.5	22.1 to 23.2	11.5 to 12.5
11.00	95.5 to 97.5	57.0 to 59.5	42.3 to 43.6	21.0 to 23.0
22.00	100	73.5 to 76.0	62.5 to 64.5	36.0 to 38.5
44.00	-----	89.5 to 91.5	82.0 to 83.5	58.0 to 60.0
88.00	-----	97.9 to 98.9	94.7 to 96.0	85.0 to 86.5
124.50	-----	99.0 to 100.0	97.2 to 98.6	93.0 to 94.0
176.00	-----	100	99.0 to 100	97.2 to 98.2
248.90	-----	-----	100	99.0 to 100.0
352.00	-----	-----	-----	100.0

Graphical Comparison of ISO 12103-1 Test Dust Grades
Based on ISO 12103-1 Specified Limits Median
(Cumulative Volume)

