



Airborne Particulate Cleanliness Class Comparison (Number of Particles per Cubic Meter by Micrometer Size)

ISO 14644-1							FED STD 209E	
CLASS	0.1µm	0.2µm	0.3µm	0.5µm	1µm	5µm	CLASS	0.5µm
1	10	2						
2	100	24	10	4				
3	1,000	237	102	35	8		1	35.3
4	10,000	2,370	1,020	352	83		10	353
5	100,000	23,700	10,200	3,520	832	29	100	3,530
6	1,000,000	237,000	102,000	35,200	8,320	293	1,000	35,300
7				352,000	83,200	2,930	10,000	353,000
8				3,520,000	832,000	29,300	100,000	3,530,000
9				35,200,000	8,320,000	293,000		



Hal Technology

<http://www.haltechnologies.com>

APN01



EU/MCA Airborne Particulate Cleanliness Class Comparison

Number of Particles per Cubic Meter (Cubic Foot) by Micrometer Size

Grade	Maximum permitted number of particles per cubic meter (or per cubic foot) equal to or above			
	At Rest		In Operation	
	0.5 μm	5 μm	0.5 μm	5 μm
A	3,500 (100)	0	3,500 (100)	0
B	3,500 (100)	0	350,000 (10K)	2,000
C	350,000 (10K)	2,000	3,500,000 (100K)	20,000
D	3,500,000 (100K)	20,000	Not defined	Not defined

According to Good Manufacturing Practice (GMP), recommended sample volume for Grade A cleanliness should be 1 cubic meter per sample location

