ISO 8573-1:2010 Purity Classes

Class	Particles					Water			Oil
	By particle size (maximum particles per m^3)				By mass (mg/m^3)	Vapor pressure dewpoint		Liquid (g/m^3)	Liquid, aerosol & vapor (mg/m^3)
	0.1 < d ≤ 0.5 micron	0.5 < d ≤ 1.0 micron	1.0 < d ≤ 5.0 micron	Micron > 5		°C	°F		
0	As specified by the equipment user or supplier, and more stringent than Class 1								
1	≤20,000	≤400	≤10	none	–	≤−70	≤−94	–	≤0.01
2	≤400,000	≤6,000	≤100	none	–	≤−40	≤−40	–	≤0.1
3	–	≤90,000	≤1,000	none	–	≤−20	≤−4	–	≤1
4	–	–	≤10,000	none	–	≤+3	≤+37	–	≤5
5	–	–	≤100,000	none	–	≤+7	≤+45	–	–
6	–	–	–	–	0–≤5	≤+10	≤+50	–	–
7	–	–	–	–	5–≤10	–	–	≤0.5	–
8	–	–	–	–	–	–	–	≤5	–
9	–	–	–	–	–	–	–	≤10	–
X	–	–	–	–	>10	–	–	>10	>5

Note 1: Shaded areas indicate classes for which Trace Analytics methods apply. Other classes require techniques outside the Trace Analytics scope.

Note 2: ISO 8573 Oil includes aerosol, vapor, and liquid oil. Liquid oil is typically sampled when wall flow is present, contamination is suspected, or results are greater than 5 mg/m3. Trace Analytics does not provide liquid oil or water testing.

Note 3: For Particle Class 1 and 2 (0.1-0.5 µm range only), a laser particle counter is required. Rental of this equipment is available on a reservation basis.

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