Performance Requirements Tested as Per Various Clauses Of IS 9473:2002		
Vital Test	Requirement as per Standard	Karam Respirator
Particulate Filtering Efficiency (Clause 5.4.2 of IS 9473:2002 and EN 149:2001+A1:2009)	Requirement as per standard- 80%	Exceeds 90%
Breathing Resistance (Clause 5.11 of IS 9473:2002 and EN 149:2001+A1:2009)	 Inhalation Flow- 30 l/min: Should be less than 0.6 mbar Inhalation Flow- 95 l/min: Should be less than 2.1 mbar Exhalation Flow- 160 l/min: Should be less than 3.0 mbar 	0.3 mbar1.5 mbar1.9 mbar
Total Inward Leakage (Clause 5.4.1 of IS 9473:2002 and EN 149:2001+A1:2009)	 The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22% The arithmetic mean of the total inward leakage of at least 46 subjects should not be greater than 25% 	2.44%7.08%
CO2 Content of Inhalation Air (Clause 5.7 of IS 9473:2002 and EN 149:2001+A1:2009)	Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)	< 0.5%
Flammability (Clause 5.6 of IS 9473:2002 and EN 149:2001+A1:2009)	The face mask when subject to pass the flame once at the specified speed should not continue to burn after removal of flame	KARAM Respirator does not continue to burn after removal of flame
Bacterial Filtering Efficiency	Bacterial filtering efficiency should be >90%	> 99%