

| 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)        | Requirement as per standard- 80%  | Exceeds 90%  |
| Breathing Resistance (Clause 5.11 of IS 9473:2002)                     | <ul style="list-style-type: none"> <li>Inhalation Flow- 30 l/min: Should be less than 0.6 mbar</li> <li>Inhalation Flow- 95 l/min: Should be less than 2.1 mbar</li> <li>Exhalation Flow- 160 l/min: Should be less than 3.0 mbar</li> </ul>                                      | <ul style="list-style-type: none"> <li>0.3 mbar</li> <li>1.4 mbar</li> <li>1.2 mbar</li> </ul> |
| Total Inward Leakage (Clause 5.4.1 of IS 9473:2002)                    | <ul style="list-style-type: none"> <li>The arithmetic mean of the total inward leakage of at least 8 out of 10 subjects should not be greater than 22%</li> <li>The arithmetic mean of the total inward leakage of at least 46 subjects should not be greater than 25%</li> </ul> | <ul style="list-style-type: none"> <li>2.89%</li> <li>6.58%</li> </ul>                         |
| CO <sub>2</sub> Content of Inhalation Air (Clause 5.7 of IS 9473:2002) | Carbon dioxide content of the inhalation air (dead space) should not exceed an average of 1% (by vol.)  | < 0.4%   |
| Flammability (Clause 5.6 of IS 9473:2002)                              | 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%   | > 90%  |