

## BLOOD PENETRATION RESISTANCE

### Test Summary



A volume of synthetic blood was disbursed at the mask to simulate the impact (splatter) of blood or other body fluid onto the specimen. Any evidence of synthetic blood penetration on the inner facing of the mask (side contacting the wearer's face) constitutes a failure. Samples are evaluated at one or more velocities of 450, 500, and 635 cm/s, corresponding to the velocity of blood exiting a small arterial puncture at human blood pressures of 80, 120, and 160 mmHg. The distance from the target area to the tip of the cannula is 30.5 cm, with the impact of the spurt normal to the target area. Test results are reported at each tested velocity or corresponding pressure, and the medical face mask is rated at the highest corresponding blood pressure for which the mask demonstrates an acceptable quality limit of 4.0. The test was conducted in accordance with Test Method ASTM F1862.

**Date Tested** 02-Mar-2021

**Test Side and Area** Outside, Centre

**Conditioning Parameters** 85 ± 5% relative humidity and 21 ± 5°C for a minimum of 4h

**Laboratory Conditions** % Relative Humidity; °C

**Acceptance Criteria** The output of synthetic blood before and after 16 articles must be within 2% of the theoretical output

**29 of 32 tests must show a passing result**

ASTM Level 1: Pass at 80 mmHg

ASTM Level 2: Pass at 120 mmHg

ASTM Level 3: Pass at 160 mmHg

Article No.	80 mmHg	120 mmHg	160 mmHg	Article No.	80 mmHg	120 mmHg	160 mmHg
1	n/a	n/a	Pass	17	n/a	n/a	Pass
2	n/a	n/a	Pass	18	n/a	n/a	Pass
3	n/a	n/a	Pass	19	n/a	n/a	Pass
4	n/a	n/a	Pass	20	n/a	n/a	Pass
5	n/a	n/a	Pass	21	n/a	n/a	Pass
6	n/a	n/a	Pass	22	n/a	n/a	Pass
7	n/a	n/a	Pass	23	n/a	n/a	Pass
8	n/a	n/a	Pass	24	n/a	n/a	Pass
9	n/a	n/a	Pass	25	n/a	n/a	Pass
10	n/a	n/a	Pass	26	n/a	n/a	Pass
11	n/a	n/a	Pass	27	n/a	n/a	Pass
12	n/a	n/a	Pass	28	n/a	n/a	Pass
13	n/a	n/a	Pass	29	n/a	n/a	Pass
14	n/a	n/a	Pass	30	n/a	n/a	Pass
15	n/a	n/a	Pass	31	n/a	n/a	Pass
16	n/a	n/a	Pass	32	n/a	n/a	Pass

**Passes at 80 mmHg** n/a

**Passes at 120 mmHg** n/a

**Passes at 160 mmHg** 32/32

**Reviewed by:**

**Authorized by:**

Test results only apply to the samples submitted for analysis. Samples are randomly selected for each test from the submitted batch. It is the responsibility of the distributor to ensure the tested batch is compliant to the required sampling methodology as per ANSI/ASQ Z1.4. Additional test information is available upon request. Kinectrics is accredited to ISO 17025 by the Standards Council of Canada for ASTM F2100