

Prepared For:  
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GERMANY

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### SYNTHETIC BLOOD PENETRATION RESISTANCE – FINAL REPORT

Laboratory Number:	516833
Procedure Number:	STP0012 REV 03
Sample Source:	Dräger Safety AG & Co. KGaA
Sample Identification:	Refer to Table 1
Deviations:	None
Statement of Uncertainty:	If applicable, available upon request
Lab Conditions:	20°C and 30% relative humidity (RH)
Study Received Date:	02 Mar 2010
Lab Phase Start Date:	04 Mar 2010
Lab Phase Completion Date:	06 Mar 2010
Report Issue Date:	08 Mar 2010

Procedure: This report describes details for testing surgical face masks and other types of protective clothing materials designed to shield against fluid penetration. The purposes of this procedure are to simulate an arterial spray and then evaluate the effectiveness of the material in protecting the healthcare worker from possible exposure to blood and other body fluids. This test method was designed to comply with ASTM F1862.

Samples were conditioned for a minimum of 4 hours at a temperature of  $21 \pm 5^\circ\text{C}$  and a relative humidity of  $85 \pm 5\%$ . A specimen was mounted on a fixture, 12 inches from the tip of the cannula, and subjected to a 2 mL volume spray of the synthetic blood. Each sample was observed for penetration within 10 seconds of dispensing the synthetic blood against the target area. After every sixteen specimens, synthetic blood was delivered into a graduated cylinder and weighed to ensure the test apparatus was still delivering 2 mL of synthetic blood.

Results: To meet an Acceptable Quality Level of 4.0%, it is required that 29 of the 32 specimens pass the test. The results are summarized in Table 1.

  
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Technical Reviewer

  
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Hilda M. Fontanet, B.S.  
Study Director

  
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08 Mar 2010  
Study Completion Date

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TABLE 1. Synthetic Blood Penetration Resistance  
Sample Identification: Dräger X-plore 1730 FFP3 (P/N: 3951086)  
Test Pressure: 160 mm Hg

SAMPLE NUMBER	SYNTHETIC BLOOD PENETRATION	SAMPLE NUMBER	SYNTHETIC BLOOD PENETRATION
1	None Seen	17	None Seen
2	None Seen	18	None Seen
3	None Seen	19	None Seen
4	None Seen	20	None Seen
5	None Seen	21	None Seen
6	None Seen	22	None Seen
7	None Seen	23	None Seen
8	None Seen	24	None Seen
9	None Seen	25	None Seen
10	None Seen	26	None Seen
11	None Seen	27	None Seen
12	None Seen	28	None Seen
13	None Seen	29	None Seen
14	None Seen	30	None Seen
15	None Seen	31	None Seen
16	None Seen	32	None Seen