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TECHNICAL INFORMATION

Blood Evidence DISCHAPS™

Catalog Nos. DCB100, DCB200, DCB300, DCB400

Information

DISCHAPS™ (disposable chemical applicators) is a complete chemical application system that includes reagents for testing blood and seminal fluid as well as providing reagents for serial number restoration, invisible thief detection, and the enhancement of latent prints developed with iodine fuming. This Technical Information bulletin will cover the use of Blood reagents.

DISCHAPS™ packaging virtually eliminates the possibility of contamination of chemical reagents and dramatically increases shelf life. Reagents are contained within easily crushed glass ampoules. The ampoules are then sealed inside tough, flexible polyethylene dispenser tubes.

Blood DISCHAPS™ applications rely on using the *contact method* of testing—that is, a few drops of distilled water are placed on a strip of filter paper, and the wet filter paper is pressed against the suspected stain. The DISCHAPS™ reagent is then applied to the filter paper, thus preserving the original evidence stain.

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Application	Presumptive test for the identification and enhancement of blood.			
Tools Required	• Blood DISCHAP™ • Contact Filter Papers • Distilled Water			
Hazards/Safety Info	**HMIS**			**Warning!** (DCB100/DCB300) Oxidizer. Harmful if inhaled, ingested, or absorbed through the skin. May cause severe respiratory and digestive tract irritation. **Warning! (**DCB200) Flammable. Corrosive. May cause severe respiratory and digestive tract burns. May cause severe skin and eye burns. **Caution!** Wear protective clothing and safety glasses. Use only in well-ventilated areas. For treatment due to contact, refer to the MSDS. *Go to www.sirchie.com/support.*
	DCB100	DCB200	DCB300	
	H 2	H 2	H 2	
	F 0	F 2	F 1	
	R 1	R 1	R 1	
	PP F	PP H	PP F	

Blood Testing Reagents

Three individual reagent tests are available in DISCHAPS™ blood testing formulations. The sensitivity to blood varies in strength. **Each of these tests is *destructive* to blood; therefore, the contact method should be used.** *NOTE: These tests will not differentiate between animal and human blood.*

1. **PHENOLPHTHALEIN DISCHAPS™ (DCB100)**
   Blood causes a PINK stain in just a few seconds. Considered by many field technicians to be one of the most reliable presumptive tests for the presence of blood because of its non-reaction to plant materials. Six individual tests with contact paper. Sensitivity=1:500,000.

2. LEUCO-MALACHITE DISCHAPS™ (DCB200)
An intense BLUE/GREEN color reaction in 3 seconds is presumptive evidence that blood is present. Sensitivity (1:10,000). Contains six tests with contact paper.

3. LUMINOL DISCHAPS™ (DCB300)
Luminol reagent requires a darkened area for observation. This is the ideal reagent for "aged" or invisible blood stains. In fact, the older the stain, the brighter the BLUE/WHITE color reaction (within five seconds). Sensitivity: 1:100,000. Six individual tests with contact paper.

Application

All DISCHAP™ Blood Test Reagents require the use of the contact method for blood testing. Cotton-tipped swabs may be substituted for contact paper. By using this method, the original stain is left intact and uncontaminated.

1. Place a few drops of distilled water onto a contact (filter) paper or cotton swab (Fig. 1).
2. Press the wet portion of the collection device to the suspected stain for 1-2 minutes.
3. Place the collection device on a flat, protected surface.
4. (a.) DCB100 ONLY: *Place 1-2 drops of Ethyl Alcohol onto the collection device.*
   (b.) Select the DISCHAPS™ to be used. Slide protective sleeve over the top of each ampoule and break by applying pressure with the tip of the thumb and forefinger. Apply pressure only to the *middle* of ampoule (Fig. 2).
5. Shake the tube for approximately one minute to ensure proper mixing of the reagents (Fig. 3).

FIGURE 1

FIGURE 2

FIGURE 3

6. Remove the integrity cap. Saturate the swab by holding the applicator tube in a downward position and then apply reagent to test paper (Fig. 4), not original blood stain.
7. Recap and discard the applicator. Observe the reaction—the presence of blood causes an intense color reaction in 3-5 seconds.

FIGURE 4

Investigator's Field Blood Test Kit (DCB400)

The Investigator's Field Blood Test Kit combines the three most efficient and effective reagents. The kit features Luminol, Leucomalachite and Phenolphthalein packaged in DISCHAPS™. This complete kit includes four DISCHAPS™ of each reagent, distilled water and contact test paper. Instructions and color chart are mounted permanently in kit.

References

1. Saferstein, Richard. Criminalistics: An Introduction to Forensic Science, 10th Ed., Prentice Hall, 2010.
2. Tobe, S. S., Watson, N. and Daéid, N. N. (2007), Evaluation of Six Presumptive Tests for Blood, Their Specificity, Sensitivity, and Effect on High Molecular-Weight DNA. Journal of Forensic Sciences, 52: 102–109.

DCB100 CONTENTS:
- 6- DCB1001 Phenolphthalein DISCHAPS™
- 6- 288FP1 Contact Filter Papers, 1" x 2" (2.5cm x 5.1cm)
- 1- 10ml bottle Ethyl Alcohol

DCB200 CONTENTS:
- 6- DCB2001 Leuco-Malachite DISCHAPS™
- 6- 288FP1 Contact Filter Papers, 1" x 2" (2.5cm x 5.1cm)

DCB300 CONTENTS:
- 6- DCB3001 Luminol DISCHAPS™
- 6- 288FP1 Contact Filter Papers, 1" x 2" (2.5cm x 5.1cm)

DCB400 CONTENTS:
- 1- DCB100 Phenolphthalein DISCHAPS™
- 1- DCB200 Leuco-Malachite DISCHAPS™
- 1- DCB300 Luminol DISCHAPS™
- 1- 10ml bottle Ethyl Alcohol
- 1- DCB400C Chart, Sensitivity of Blood Test & Positive Reactions
- 1-DISW1 Distilled Water w/Dropper, 1 oz. (30ml)
- 1-KCP138 Scalpel, Disposable, 5" (12.7cm)
- 1-DCB4001 Carrying Case, Textured, High-Density Polyethylene; Dimensions: 8.5" x 5.5" x 3.1875" (21.6cm x 14cm x 8.1cm); Weight: 1.15 lbs. (522g)