



## Leuco Crystal Violet

Instructions for Use and  
MSDS (Material Safety Data Sheet)  
Product Code: PF-023, PF-024, PF-025  
Effective Date: September 19, 2012  
24 Hour Emergency Contact:  
www.pioneerforensics.com  
ChemTel: (800)255-3924

### Preparation and Instructions for Use

*This test is only a presumptive test for blood. It will not discriminate between human and non-human species. Analytical testing should follow to characterize the sample as either human or non-human in origin.*

#### To Prepare LCV Working Solution

- 1.) Pour Solution A into bottle B until B is ½ full
- 2.) Replace Cap on B tightly
- 3.) Shake bottle B vigorously for 2-3 minutes
- 4.) Pour contents from B into A (large bottle)
- 5.) Replace cap on A and Shake it
- 6.) Pour new Solution A into C until C is ½ full
- 7.) Replace Cap on C tightly
- 8.) Shake C vigorously for 2-3 minutes
- 9.) Pour contents from C into A (large bottle)
- 10.) Replace Cap on A and shake for 2-3 minutes to ensure thoroughly mixed.
- 11.) Ready to use

Note : Please read section on stability.

#### Instruction for Use

Spray suspected area with the LCV reagent. Latent bloodstains will react by immediately turning a dark violet-blue color. Best used on light colored surfaces. Reagent can be used in normal lighting conditions. Photograph reaction areas prior to any collection. Suspected reaction sites should be further tested with the Phenolphthalein reagent and/or swabbed for DNA analysis.

*NOTE: Unmixed Leuco Crystal Violet components have an expiration date of one year when stored at room temp. Once mixed, the solution is stable for 2 months. Heat and sunlight will compromise stability and expiration date*

For more information and technical support, please visit us at [www.pioneerforensics.com](http://www.pioneerforensics.com)

## MSDS (Material Safety Data Sheet)

### COMPOSITION and INFORMATION on INGREDIENTS

#### Leuco Crystal Violet, Fixative Solution, A

Hazardous Ingredient: Sulfosalicylic Acid, ~5%  
CAS #: 5965-83-3      Molecular Weight: 254.22

Synonyms: 2-Hydroxy-5-sulfobenzoic acid dihydrate  
Chemical Formula: C<sub>7</sub>H<sub>6</sub>O<sub>6</sub>S.2H<sub>2</sub>O      PEL/TLV: No information Found

Hazardous Ingredient: Hydrogen Peroxide, ~3%  
CAS #: 7722-84-1      Molecular Weight: 34.01

Synonyms: hydrogen dioxide solution  
Chemical Formula: H<sub>2</sub>O<sub>2</sub>      PEL/TLV: 1 ppm from ACGIH

#### Leuco Crystal Violet, Bottle B

Hazardous Ingredient: Dry Leuco Crystal Violet  
CAS #: 603-48-5      Molecular Weight: 373.54

Synonyms: 4,4',4''-Methyldynetris(N,N-dimethylaniline)  
Chemical Formula: C<sub>25</sub>H<sub>31</sub>N<sub>3</sub>      PEL/TLV: No information Found

#### Leuco Crystal Violet, Bottle C

Hazardous Ingredient: Dry Sodium Acetate Powder  
CAS #: 127-09-3      Molecular Weight: 82.03

Synonyms: Acetic Acid, Sodium Salt  
Chemical Formula: CH<sub>3</sub>COONa      PEL/TLV: No information Found

### HAZARDS IDENTIFICATION

#### Emergency Overview:

**WARNING! MAY CAUSE SEVERE EYE IRRITATION. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO EYES, SKIN AND RESPIRATORY TRACT.**

**SAFETY RATINGS:** Health: 1, Slight      Reactivity: 0, None      Flammability: 0, None      Contact: 1, Slight

**PROTECTIVE EQUIPMENT:** Safety Glasses, Lab Coat or Apron, Gloves and General Exhaust Ventilation.

**STORAGE CODE:** Green, General Storage.

#### Potential Health Effects:

**INHALATION:** May be harmful. May cause irritation to nasal membranes and respiratory tract.

**INGESTION:** May be harmful. May cause nausea, vomiting, headache and diarrhea.

**SKIN CONTACT:** May cause irritation. Non-sensitizer for skin.

**EYE CONTACT:** Irritant. Continued exposure may cause eye lesions.

### FIRST AID MEASURES

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

**INGESTION:** Do not induce vomiting. Give several glasses of water or milk to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**SKIN CONTACT:** Wash exposed area with soap and water. Get medical advice if irritation develops.