

Maine State Police Crime Laboratory

Reagents and Controls

1. <u>Scope</u>

This document outlines the laboratory's policies on reagents and controls.

2. <u>Reagents</u>

- 2.1 A reagent is defined as any substance used (in detecting or measuring a component, in preparing a product, or in developing photographs) because of its chemical or biological activity.
- 2.2 All reagents must be labeled with the identity of the reagent, the date of preparation or lot number, and the expiration date.
 - 2.2.1 If no expiration date is provided by the manufacturer a section may determine that an expiration date should be created. Any policies that dictate how expiration dates are created should be documented within the section.
 - 2.2.2 If no expiration date is given or created for the reagent, the reagent should be marked to indicate that there is no expiration.
- 2.3 Special storage and handling requirements should be noted in the section policies or methods if applicable.
- 2.4 Records must be maintained identifying who made the reagent and the lot numbers of the chemicals used.
- 2.5 When batch stocks are made, all required entries should be made in the appropriate reagent log maintained in each section.
- 2.6 Each reagent log will record the name of the reagent, lot number assigned, initials of the person preparing the reagent, the date of preparation, chemicals used, and lot numbers of the chemicals used.
- 2.7 When reagents are made only for a single analysis and then immediately disposed of, a reagent log does not need to be maintained provided that the scientist/examiner's case notes contain the identity of the reagent.
- 2.8 If the reagent could affect the quality of the work product, the section will determine in policy or method what quality control measures must be in place to ensure the reliability of the reagent.



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3. <u>Controls</u>

- 3.1 A standard or reference material control is defined as a substance of known quantity, quality, or value.
- 3.2 A blank is defined as an analytical control sample that contains no standard or sample and is used to monitor the method of analysis.
- 3.3 Controls may be made in-house or purchased from a commercial source.
- 3.4 Each section will define the minimum specifications for controls. These specifications may be noted in the policies, methods, or purchasing documents. Some controls, such as human blood, may be produced by laboratory staff members.
- 3.5 Controls and blanks, when applicable, will be treated the same as case samples and will be carried throughout the appropriate evidence processing steps prior to or alongside the evidentiary samples.