

*Approved by Director: Dr. Guy Vallaro*

A. Purpose:

1. To enhance toolmarks for visual comparison purposes. Magnesium smoking is a technique used to reduce the glare of a shiny object by lightly coating the surface with fine magnesium smoke.

B. Responsibility:

1. It is the examiner's responsibility to conduct a visual examination and document the condition of the item prior to magnesium smoking.

C. Safety:

1. The examiner must wear eye protection and conduct this procedure in a ventilated fume hood.
2. The use of gloves and other personal protective devices is at the discretion of the examiner.

D. Procedure:

1. Light short pieces of magnesium ribbon with a flame.
2. Pass the object over the smoke that is being generated by the burning magnesium.
3. If the object collects too much smoke, wipe the smoke off and repeat the process.
4. The coating should be light enough to see the color of the item through the coating of smoke.
5. Document the condition of the item after smoking with photography.
6. Proceed with making observations and comparative examinations.

E. Equipment:

1. Magnesium ribbon tape
2. Fume hood

F. References:

1. AFTE procedures
2. Laboratory safety manual

*Approved by Director: Dr. Guy Vallaro*

G. Appropriate Appendices:

1. Appendix 1 -- Worksheets

ARCHIVED