

Re: Copper Alloy Helmet Fragment

TREATMENT REPORT

Cleaning

The fragment was first cleaned with a soft brush, followed by the removal of encrusted dirt using a sharp wooden tool. The metal surface was cleaned and de-greased using ethanol and acetone. Bright green corrosion areas resembling copper chlorides were excavated using a scalpel and cleaned with ethanol and acetone.

The area expected to have an intact inscription was mechanically cleaned using a scalpel. Cleaning revealed parts of an inscription (see photograph and drawing). Unfortunately, most of the inscription is lost due to corrosion resulting from burial.

Consolidation/Stabilization

Three unstable cracks at the back of the object were stabilized using Japanese tissue paper patches impregnated with an Acryloid B72 solution in acetone.

Storage

Given the presence of copper chlorides, i.e., salts in this object, it should be stored in a stable environment with minimal fluctuations in relative humidity. It should be kept within a polyethylene bag and stored inside a polyethylene or polypropylene container with a tight fitting lid. Silica gel should be stored along with the fragment, and should be checked at regular intervals to ensure that relative humidity levels remain low. Handle the object with gloves.