

Collections Care

Plastics and Modern Materials

Plastic, a manmade late-comer to museum collections, offers an inexpensive, supremely-shapable alternative to these traditional materials and is now finding its way into museum collections worldwide. Plastics, however – especially early versions – are quite vulnerable to light exposure, pollutants, and high or fluctuating humidity levels. Their own internal compositions can also be quite unstable, allowing fillers or “plasticizers” to migrate to the surface over time and cause the material to become tacky or brittle. As with any museum or personal collection, appropriate handling techniques and storage are the first line of defense in the preservation of objects made from any of these materials. Plastic objects must always be handled with nitrile gloves due to the toxic materials that may leach out of the object. Minimize handling of all objects and never pick up by handles or decorative motifs. Always support the object with both hands and practice general good housekeeping in storage and exhibition areas. Further tips on caring for plastics and other modern materials appear in the resources below. For information on audiovisual and photographic materials, such as film, see “Caring for Your Collection: Audiovisual and Photographic Materials.”

General Care

- Connecting to Collections Care: [“Care of Plastics” Webinar](#) (Presenters: Christine Frohnert, Conservator, and Odile Madden of the Smithsonian Institution)
- Fenn, Julia and R. Scott Williams: [“Caring for Plastics and Rubbers”](#) (Government of Canada)
- Getty Conservation Institute: [“A Safe Place: Storage Strategies for Plastics”](#) (by Yvonne Shashoua)
- Minnesota Historical Society: [“Plastics and Modern Materials”](#)
- National Park Service:
 - [“Care and Identification of Objects Made from Plastic”](#) (Conserve O Gram Series, September 2010, number 8/4)
 - [“Monitoring Acidic Off-Gassing of Plastics”](#) (Conserve O Gram Series, September 2010, number 8/4)
- Rhode Island School of Design (RISD) Museum: [“The Care and Preservation of Art Composed of Plastic”](#) (by Ingrid Neuman)
- Tsang, Jia-sun: [“Safe Handling of Plastics in a Museum Environment”](#) (Western Association for Art Conservation Newsletter, volume 32 number 1)