



Services to the Sciences Since 1924

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MOM-STORAGE-T-0684

Meltpmount™

Notes on use for slides mounted in Meltpmount™ from the manufacturer.

1. Meltpmount™ is a THERMAL PLASTIC MATERIAL. This means its viscosity is dependent on temperature, (inversely dependent). As the temperature increases the viscosity decreases. There is no sharp melting point. Being thermal plastic, it is also capable of "cold flow". This means the Meltpmount™, the specimen, the slide, and the cover slip can all move independently of each other given a mix of time, temperature, and lateral pressure or gravity.

2. Storage of prepared slides: treat them as the valuable items that they are.

Store:

- A. Flat, cover slip up
- B. In the dark
- C. Away from dust and fumes
- D. At 60° C to 85° C: Meltpmount™ is meant to be thermally reversible. Do not allow this to happen inadvertently by storing or transporting prepared slides above 95° F (35° C).

MELTMOUNT™ CODE 25761
FOR
CHRYBOTILE ASBESTOS IDENTIFICATION
Catalog # 24145

Meltmount™ Code 25761 for Chrysotile Asbestos identification is a mounting medium designed for making permanent slides of chrysotile asbestos. It has virtually the same dispersion staining colors with chrysotile as does Cargille Refractive Index Liquid Series E 1.550.

CRYSTALLIZATION: Meltmount™ Code 25761 for Chrysotile Asbestos Identification stored at room temperature will normally form a white crystalline mass about one to three weeks after it was last melted. A bottle or a slide that has crystallized can be heated to 100 °C (but not above 120 °C) to remelt the crystals. This will return it to its original state and the dispersion staining colors will be unchanged. Melting crystals in a bottle of Meltmount™ is best done by removing the cap, placing the cap inverted on top of the bottle (this will keep out dust, and the cap liner will not get so hot as to melt), and then heating the bottle on a hotplate set to medium heat (heat bottle contents to about 100 °C, but not above 120 °C). Melting crystals in a slide of Meltmount™ is best done by placing the slide for approximately 1 second on a hotplate set to medium. Slides of Chrysotile in Meltmount™ for Chrysotile Asbestos Identification of a very similar formulation to the current Code 25761, after three years in the crystallized state, were returned to their original appearance and dispersion colors by just heating on a hotplate for about 1 second. A slide of chrysotile mounted in the current formula Code 25761 has been melted and cooled 100 times without a perceptible change in its dispersion staining colors.

There are many ways to make a slide using Meltmount™ for Chrysotile Asbestos Identification. Here are three ways that you may find satisfactory:

1. THE DRY SLIDE METHOD : On a variable setting hotplate, place the bottle of Meltmount™ with cap removed and placed inverted on top of the bottle mouth (this will keep out dust, and the cap liner will not get so hot as to melt). Set hotplate to medium heat (about 100 °C, but not above 120 °C). Place the sample of asbestos on the slide, then place a cover glass over the sample. When the Meltmount™ in the bottle has been melted by the hotplate, and is thin enough to form drops, put the slide with sample and cover glass briefly on the hotplate (keeping one end of the slide over the edge of the hotplate so that it will not get hot and can be handled). While the slide is on the hotplate apply Meltmount™ at the corners of the cover glass using a glass applicator rod or glass eyedropper. The Meltmount™ will flow under the cover glass. Apply more Meltmount™ until all the space under the cover glass is filled. Level cover glass using the eraser end of a pencil. Remove the slide from the heat. As soon as it cools, you will have a permanent slide.
2. THE WET SLIDE METHOD: Set up a bottle of Meltmount™ on a hotplate as in the Dry Slide Method. Place a slide (without sample or cover slip) on the hotplate and apply a drop of Meltmount™ to its center. Remove slide from heat. When the drop of Meltmount™ has mostly cooled, bring some of your asbestos sample in contact with the drop, then remove sample leaving a few fibers stuck to the drop. Place cover glass on drop and briefly heat on the hotplate, until the space below the cover glass has filled in. If needed, add drops of Meltmount™ to the edge of the cover glass. Level cover glass using the eraser end of a pencil. Then cool slide to room temperature and you will have a permanent mount.
3. THE PRESSURE METHOD: Set up a bottle of Meltmount™ on a hotplate as in the Dry Slide Method. Apply Meltmount™ to a slide in roughly the size and shape of a cover glass, and allow to cool to room temperature. To mount a sample, either drop the sample onto the Meltmount™ on the slide, or place the slide up against the sample. Place a cover glass over the Meltmount™ and sample, then place another slide on top of the cover glass, and apply pressure between your thumb and index finger, or place it beneath a suitable weight (such as a book) overnight.

Slides with just the Meltmount™ applied and without cover glass can be made in advance and stored in a slide box. This method may be useful for field collecting.

Note: Prolonged or excessive heating of Code 25761 Meltmount™ for Chrysotile Asbestos Identification will adversely affect its optical properties. Do not heat above 120 °C. When you are done using a bottle of Meltmount™, remove it from the hot plate. Keep the bottle of Meltmount™ covered with cap or foil whenever possible.