

Hot Mounting



A complete range of resins for high preparation quality, uniform size and shape of specimens, and short process times



- Transparent mounts with a clear view to all details
- Porous specimens
- Electrolytic polishing
- Superior edge retention and optimal planeness
- Examination in scanning electron microscope (SEM)
- Color coding
- Fast mounting
- Routine examination of uncomplicated specimens

Hot Mounting

The purpose of mounting is to protect fragile or coated materials during preparation and to obtain perfect edge retention. Mounting also allows for a safer, more convenient handling of e.g. small, sharp or irregularly shaped specimens.

Hot mounting is ideal for large numbers of specimens coming to the lab successively. The resulting mounts are of high quality, uniform size and shape, and require only a short process time¹.

Hot mounting is carried out using a mounting press where the specimen is placed in a mounting cylinder together with the appropriate mounting resin. Struers offers mounting presses for every purpose – from semi-automatic presses for mounting of only a few specimens to fully automatic, dual cylinder presses for high throughput.

¹ Cold mounting is suitable for a large series of specimens coming to the lab simultaneously, and also for single specimens. Please see separate brochure.

CitoPress. A line of hot mounting presses for every purpose



A clear sight to all specimen details

For certain materials you need to view the specimen during preparation, for example when grinding down to a certain point of the specimen. ClaroFast gives you transparent mounts with a clear sight to all specimen details.

Porous specimens

Certain materials like ceramics, plasma sprayed coatings or specimens for failure analysis require special care during preparation. Porosity, gaps, cracks and loose particles can easily be altered or even removed during preparation if the specimens are not mounted properly. Use ClaroFast for careful preparation of porous materials.

Electrolytic polishing

Electrolytic polishing requires an electrically conductive resin. ConduFast contains iron powder filler for optimal conduction.

Superior edge retention

Excellent edge retention is often a requirement when you need to examine the edge of a specimen and when the protection of layers is essential. DuroFast offers excellent edge-retention for hard materials while LevoFast is excellent for soft to medium hard materials. IsoFast contains only glass fibers, and is used for a good edge-retention for hard materials and in cases where a mineral filler is not suitable for specific analytical methods.

Examination in SEM

Low shrinkage and high conductivity are necessary for examinations with the scanning electron microscope (SEM). PolyFast

ClaroFast gives a clear view of all specimen details



IsoFast with glass filler



DuroFast offers excellent edge retention for hard materials

is a perfect resin for SEM as this resin has a low shrinkage and carbon filler to secure the conductivity.

Color coding

Color coding allows easier handling and more accurate identification of mounted specimen preparation. MultiFast is available in three colors.

Fast and easy routine examination

For materials without specific application requirements, speed or easy handling is often the focus. PolyFast in combination with CitoPress is the fastest way to mounting (go to page 4 for more information). MultiFast is suitable for routine examination of soft to medium hard materials while Pre-Mount is for serial mounting of uncomplicated specimens.

When using the more expensive IsoFast, DuroFast and LevoFast, a substantial cost saving can be made by adding only a small amount of the desired resin to form the preparation surface, and then completing the required amount with the less expensive MultiFast.



ConduFast is excellent for electrolytic polishing



MultiFast is for routine examination of soft to medium hard materials



Struers' Selection Guide

The easy way to the right choice

Selection Guide

One of the main focus areas of hot mounting is the application area. To make your choice easier, we have designed a selection guide based on the application area for different types of hot mounting resins.

Recommended use	Specific properties	Hot mounting resin	Material
Clear mounts. Porous specimens	Clear transparent	ClaroFast	Acrylic resin
Electrolytic polishing	Electrically conductive	ConduFast	Acrylic resin with iron filler
Good edge-retention for hard materials	With glass filler only Low removal rate	IsoFast	Diallylphtalate with glass filler
Excellent edge-retention for hard materials	Very low shrinkage Very low removal rate	DuroFast	Epoxy with mineral filler
Excellent edge-retention for soft to medium hard materials	Very low shrinkage High removal rate	LevoFast	Melamine with mineral and glass filler
Fast mounting process. SEM examination	Very low shrinkage Medium removal rate	PolyFast	Bakelite with carbon filler
Routine examination of soft to medium hard materials. Color coding	Medium shrinkage Medium removal rate	MultiFast	Bakelite with wood filler
Serial mounting of uncomplicated specimens	In pellet form for easy handling	Pre-Mount	Bakelite with wood filler



LevoFast

For excellent edge-retention

LevoFast is a thermosetting melamine with mineral and glass fibres as filler, excellent for mounting of soft and medium hard materials.

- Excellent edge-retention
- Extremely low and uniform shrinkage
- Superior abrasion rate and workability

PolyFast

For fast mounting

PolyFast is a thermosetting, bakelite resin with carbon filler, very suitable for fast mounting and for examination in a SEM.

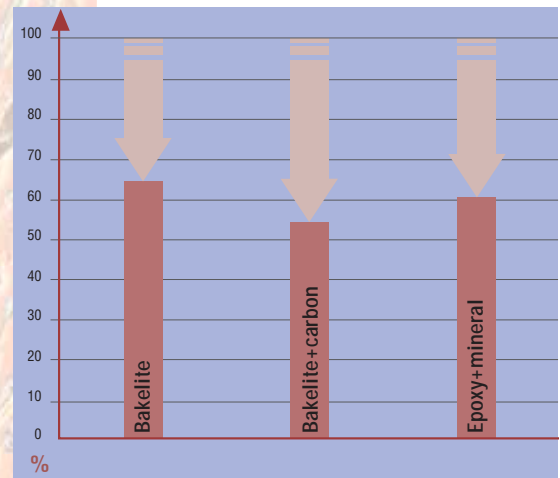
- Short mounting time
- Very low shrinkage
- Medium removal rate
- Electrically conductive for SEM



CitoPress-20 hot mounting press



CitoPress mounting times for different resins, compared to competing presses (competing presses = 100%)



The combination of PolyFast (Bakelite+carbon) resin and CitoPress, is the fastest way of mounting and increasing production capacity



Edge of aluminium specimen, mounted in LevoFast, DIC, 200x



LevoFast offers excellent edge-retention for soft and medium hard materials



PolyFast is for fast mounting and for examination in an SEM

Specifications

Hot mounting resin	Colour	Amount	Code	Item no.
ClaroFast	Clear	1 kg	CLAON	40100055
		7.5 kg	CLAME	40100054
		25 kg	CLALA	40100053
ConduFast	Grey	1 kg	RESFE	40100039
IsoFast	Green	1 kg	RESDI	40100042
		7.5 kg	RESTY	40100043
DuroFast	Black	1 kg	RESIF	40100044
		7.5 kg	RESEN	40100045
LevoFast	Light yellow	1 kg	LEVON	40100057
		7.5 kg	LEVME	40100058
PolyFast	Black	1 kg	FAPSA	40100036
		7.5 kg	FAPME	40100037
MultiFast	Black	2.5 kg	RESRU	40100027
		7.5 kg	RESUK	40100028
		25 kg	RESLA	40100029
		75 kg	RESBI	40100063
MultiFast Green	Green	2.5 kg	FAGSA	40100030
		7.5 kg	FAGME	40100031
MultiFast Red	Red	2.5 kg	MUREM	40100060
		7.5 kg	MURES	40100061
		25 kg	MURET	40100062
Pre-Mount 25 mm / 1" dia.	Black	10 kg (approx 1.100 pcs.)	RESUN	40101001
Pre-Mount 30 mm / 1¼" dia.	Black	10 kg (approx 760 pcs.)	RESGI	40101003
Pre-Mount 40 mm / 1½" dia.	Black	10 kg (approx 460 pcs.)	RESAM	40101005
Accessories				
Fixation Clips 6 mm		100 pcs	CLIMO	40300026
Fixation Clips 9 mm		100 pcs.	CLIPS	40300025
EpoDye		20 g	EPOLU	40300002
AntiStick		8 g	FASTI	40300043



ClaroFast mount



LevoFast mount

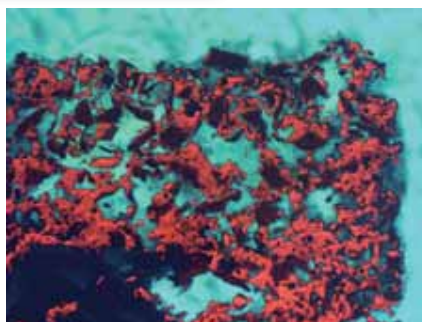
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Struers offers a variety of accessories to provide easier handling and more accurate specimen preparation.

- AntiStick prevents the mounting resins from sticking to the rams of the press
- Metal spring clips to hold or support small specimens
- EpoDye, fluorescent dye for use with ClaroFast for microscopic examination of porous materials



Plasma spray coating, mounted in ClaroFast with EpoDye, 100x

Struers' products are subject to constant product development. Therefore, we reserve the right to introduce changes in our products without notice

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