

CONSUMABLES FOR MOUNTING PROCESS

Mounting is the second step of the metallographic sample preparation.

This procedure is recommended for small, fragile, particularly shaped or thin layered samples.

Samples are englobed into a resin for protection, handling and having uniform sizes to obtain the best grinding/polishing operations.

Depending on the materials, two techniques are available:

- hot mounting
- cold mounting

CONSUMABLES FOR MOUNTING PROCESS

SELECTION GUIDE

HOT MOUNTING

Model	Resin type	Hardness	Shrinkage	Temperature	Heating time	Cooling time	Resin properties	Recommended for
HotMresin-B	Phenolic	90 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Black phenolic lightly filled with glass fiber	Standard mounting media for soft materials
HotMresin-G	Phenolic	90 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Green phenolic	Standard mounting media for soft materials
HotMresin-R	Phenolic	90 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Red phenolic	Standard mounting media for soft materials
HotMresin-Br	Phenolic	90 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Brown phenolic	Standard mounting media for soft materials
HotMresin-Bgf	Phenolic, glass fiber	95 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Black phenolic with glass fiber	Standard mounting for medium-hard materials
HotMresin-CCB	Conductive phenolic	90 shore D	Low	150 to 180°C	3 to 5 min	2 to 4 min	Black phenolic with carbon, electrically conductive	Mounting media for soft to hard materials, for electrolytic polishing or SEM application
HotMresin-T	Acrylic	88 shore D	Low	180 to 190°C	7 to 9 min	5 to 6 min	Transparent acrylic	Mounting media for soft to medium materials, suitable when is required a transparent mold
HotMresin-CCBr	Conductive acrylic	90 shore D	Low	160 to 180°C	6 to 9 min	3 to 4 min	Brown acrylic with copper, electrically conductive	Mounting media for soft to hard materials, for electrolytic polishing
HotMresin-EB	Epoxy	96 shore D	Very low	160 to 180°C	5 to 6 min	3 to 4 min	Black epoxy, very low removal rate	Hard materials, edge observation, surface deposit, coating

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Hot mounting resins					
Code	Model	Color	Q.ty kg	Description	Weight kg
3000250	HotMresin-B	●	2,5	Phenolic resin, lightly filled with glass fiber	2,7
3001000		●	10		10,4
3002500		●	20		26
3010250	HotMresin-G	●	2,5	Phenolic resin	2,7
3011000		●	10		10,4
3012500		●	20		26
3020250	HotMresin-R	●	2,5	Phenolic resin	2,7
3021000		●	10		10,4
3022500		●	20		26
3030250	HotMresin-Br	●	2,5	Phenolic resin	2,7
3031000		●	10		10,4
3032500		●	20		26
3080100	HotMresin-Bgf	●	1	Phenolic glass fiber resin	1,3
3080250		●	2,5		2,7
3081000		●	10		10,4
3040100	HotMresin-CCB	●	1	Carbon conductive phenolic resin	1,3
3040250		●	2,5		2,7
3050100	HotMresin-T	○	1	Acrylic transparent resin	1,3
3050250		○	2,5		2,7
3051000		○	10		10,4
3060200	HotMresin-CCBr	●	2	Conductive acrylic copper resin	2,3
3070100	HotMresin-EB	●	1	High quality epoxy resin	1,3
3070250		●	2,5		2,7
3071000		●	10		10,4
3071500		●	15		15,6
3072500		●	20		20,7

Mould release agent					
Code	Model	Q.ty ml	Description	Weight kg	
75RA000	Release agent	500	Spray SIL-JET	0,5	

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SELECTION GUIDE

COLD MOUNTING

Cold mounting

Model	Resin type	Hardness	Shrinkage	Max. temperature	Curing time	Mixing ratio volume	Resin properties	Recommended for
ColdMresin-T	Acrylic	85 shore D	Low	85°C	8 to 10 min	2 volumes of powder + 1 volume of liquid	Translucent acrylic	Control/general use with fast mounting
ColdMresin-G	Acrylic	92 shore D	Very low	78°C	5 to 7 min	2 volumes of powder + 1 volume of liquid	Green acrylic	Hard materials with fast mounting
ColdMresin-B	Acrylic	90 shore D	No	85°C	7 to 10 min	2 volumes of powder + 1 volume of liquid	Blue acrylic	Hard materials with fast mounting
ColdMresin-CC	Conductive acrylic	82 shore D	Low	75°C	18 to 20 min	1 volume of powder + 1 volume of liquid	Carbon conductive acrylic	SEM control or electrolytic polishing
ColdMresin-E	Epoxy	84 shore D	No	75°C / 180°C	About 12 hours at 25°C / 30 min at 80°C	12% of hardener	Transparent epoxy	Porous materials observation edges and coating temperature sensitive materials

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Cold mounting resins						
Code	Model	Color	Q.ty	Description	Weight kg	Mixing ratio volume
20P0100	ColdMresin-T	○	1 kg	High quality powder acrylic translucent resin	1,2	2 volumes of powder + 1 volume of liquid
20P1000		○	10 kg		10,5	
20L0050		○	0,5 l	High quality liquid acrylic translucent resin	1	
20L0100		○	1 l		1,5	
20L0500		○	5 l		5,6	
22P0100	ColdMresin-G	●	1 kg	High quality powder acrylic green resin	1,2	2 volumes of powder + 1 volume of liquid
22P1000		●	10 kg		10,5	
22L0050		●	0,5 l	High quality liquid acrylic green resin	1	
22L0100		●	1 l		1,5	
22L0500		●	5 l		5,6	
23P0100	ColdMresin-B	●	1 kg	Very high quality powder acrylic blue resin	2,4	2 volums of powder + 1 volume of liquid
23P1000		●	10 kg		0,7	
23L0050		●	0,5 l	Very high quality liquid acrylic blue resin	0,7	
23L0100		●	1 l		1,2	
23L0500		●	5 l		5,6	
25L0100	ColdMresin-E	○	1 l	High quality epoxy highly transparent resin	1,3	120ml of Hardner-E + 1l epoxy
26P0100	ColdMresin-CC	●	1 kg	Powder acrylic carbon conductive resin	1,3	1 volume of powder + 1 volume of liquid
26L0100		●	1 l	Liquid acrylic carbon conductive resin	1,3	

Hardener for epoxy resin						
Code	Model	Color	Q.ty	Description	Weight kg	Mixing ratio volume
25L0100	ColdMresin-E	○	1 l	High quality epoxy highly transparent resin	1,3	120ml of Hardner-E + 1l epoxy

Code	Model	Q.ty ml	Description	Weight kg
25HE250	Hardner-E for 25L0100	250	Hardener for epoxy resin	0,5



CONSUMABLES FOR MOUNTING PROCESS

Mold C

Molds for cold mounting process

Code	Diameter mm	Lenght mm	Width mm	Height mm	Description	Q.ty/Pack	Weight kg
5802025	25	/	/	27	Polypropilene mold	5	0,3
5802030	30	/	/	27		5	0,3
5802040	40	/	/	27		5	0,2
5800025	25	/	/	23	High quality silicon mold	5	0,3
5800030	30	/	/	25		5	0,3
5800040	40	/	/	30		5	0,3
5800050	50	/	/	30		3	0,3
5800060	60	/	/	35		3	0,3
5801055	/	55	30	22		3	0,4
5801070	/	70	40	22		3	0,4
5801100	/	100	50	22	3	0,5	

