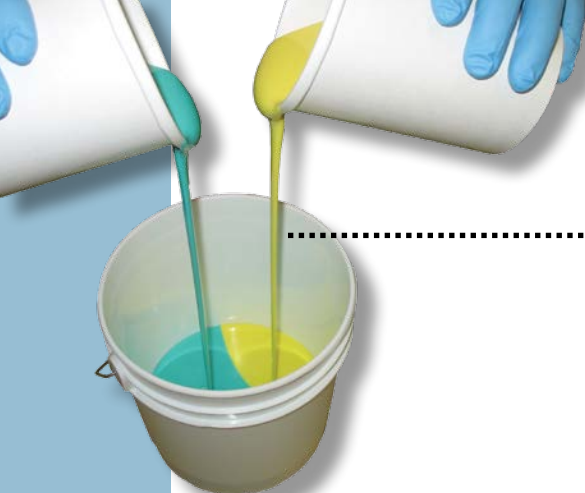


Polytek
Development Corp.

Mold Making & Casting Materials *for Sculptors & Foundries*





Getting Started:

Polytek® manufactures liquid mold rubbers and casting plastics that can be *poured, brushed, or sprayed* onto original models to create molds and reproduce art.



⋮
Pour



⋮
Brush



⋮
Spray

To have a successful mold making experience:

Study --

Read as much "How-To" literature as possible. Visit www.polytek.com and go to the "How-To" section for tutorials and videos.

Start Small --

Make a small, simple mold and casting before attempting an important piece. Get a feel for the materials without costly mistakes.

Ask Questions --

Some questions to consider before beginning your mold making or casting project:

- *What is the model made of?*
- *Does the shape or location of the model present mold making or demolding challenges?*
- *What material will the castings be made of?*
- *How many castings do you envision making?*

Polytek® technical support staff is available to answer your mold making and casting questions:



Polytek
Development Corp.

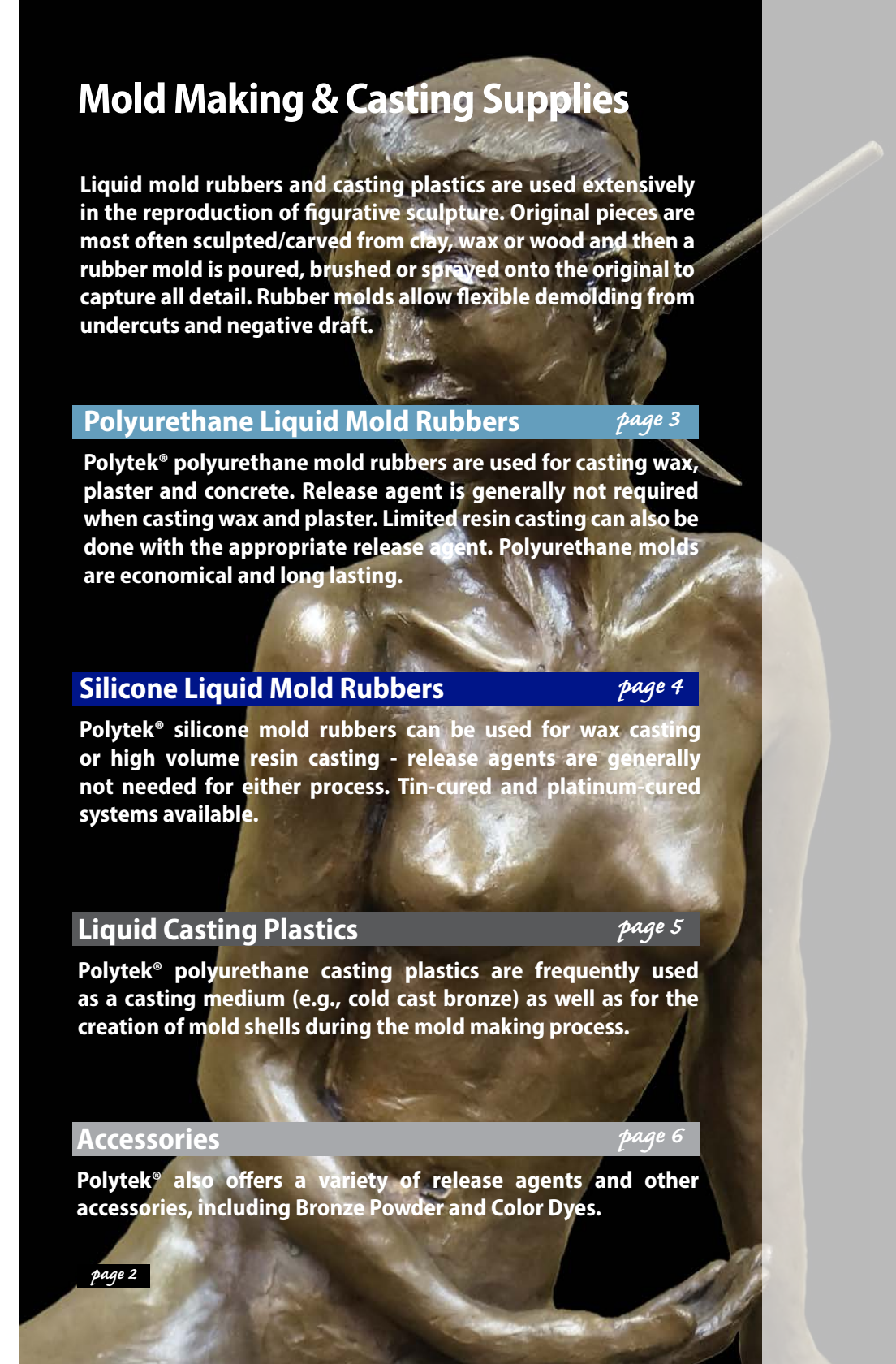
www.polytek.com

800.858.5990

sales@polytek.com



Mold Making & Casting Supplies



Liquid mold rubbers and casting plastics are used extensively in the reproduction of figurative sculpture. Original pieces are most often sculpted/carved from clay, wax or wood and then a rubber mold is poured, brushed or sprayed onto the original to capture all detail. Rubber molds allow flexible demolding from undercuts and negative draft.

Polyurethane Liquid Mold Rubbers

page 3

Polytek® polyurethane mold rubbers are used for casting wax, plaster and concrete. Release agent is generally not required when casting wax and plaster. Limited resin casting can also be done with the appropriate release agent. Polyurethane molds are economical and long lasting.

Silicone Liquid Mold Rubbers

page 4

Polytek® silicone mold rubbers can be used for wax casting or high volume resin casting - release agents are generally not needed for either process. Tin-cured and platinum-cured systems available.

Liquid Casting Plastics

page 5

Polytek® polyurethane casting plastics are frequently used as a casting medium (e.g., cold cast bronze) as well as for the creation of mold shells during the mold making process.

Accessories

page 6

Polytek® also offers a variety of release agents and other accessories, including Bronze Powder and Color Dyes.

page 2

Polyurethane Liquid Mold Rubbers

Poly 74-30 HT Liquid Rubber

- 1A:1B Mix Ratio [HT = high-tear]
- Shore Hardness: A30
- 30-Minute Pour Time
- 16-Hour Demold Time
- Accelerate cure with *Poly 74/75 Part X Accelerator*
- For brush-on application, thicken with *PolyFiber II* or *Fumed Silica*

The Industry Standard!

Poly 74-24 Liquid Rubber

- 1A:1B Mix Ratio
- Shore Hardness: A25
- 20-Minute Pour Time
- 16-Hour Demold Time
- Accelerate cure with *Poly 74/75 Part X Accelerator*
- For brush-on application, thicken with *PolyFiber II* or *Fumed Silica*

No Thickening Agent Required!

Polygel® 35 Brush-On Rubber*

- Self-Thickening System
- 1A:1B Mix Ratio
- Shore Hardness: A35
- Sprayable version also available
- 10 to 15-Minute Working Time
- 16-Hour Demold Time
- Can be further thickened with *PolyFiber II* or *Fumed Silica* if necessary [e.g. for filling severe undercuts]

* Certain foundry waxes can cause excessive oiling in Polygel® rubbers. Perform a small test cure to ensure compatibility.



Silicone Liquid Mold Rubbers

TinSil® 80-30 Liquid Rubber

- Tin-Cured [condensation-cure]
- 1A:10B Mix Ratio
- Shore Hardness: A30
- 45-Minute Pour Time
- 24-Hour Demold Time
- Accelerate cure with *TinSil® FastCat*
- For brush-on application, thicken with *TinThix Liquid Thickener*
- For brush and spray application, consider *TinSil® Brush/Spray 25*



PlatSil® 73-25 Liquid Rubber

- Platinum-Cured [addition-cure]
- 1A:1B Mix Ratio
- Shore Hardness: A25
- 15-Minute Pour Time
- 4 to 5-Hour Demold Time
- Accelerate cure with *PlatSil® 71/73 Part X Accelerator*
- For brush-on application, thicken with *PlatThix Liquid Thickener*



No Shrink On Cure!

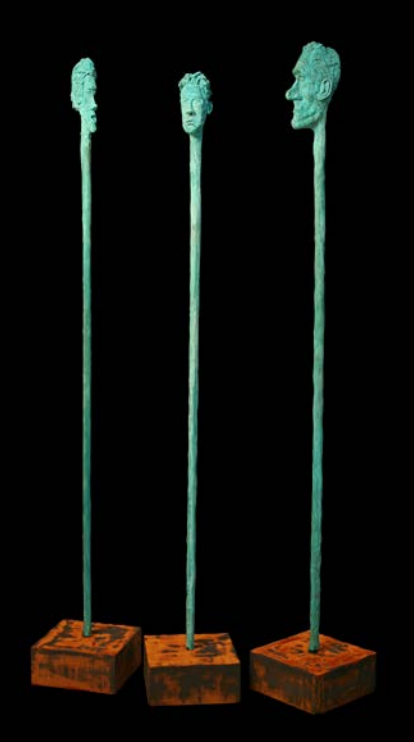


Sulfur in your clay?

Sulfur-containing clay and other sulfur/tin/amine-contaminated materials and tools will cause *cure inhibition* in platinum silicone mold rubbers (e.g., PlatSil® 73-25), which means that the rubber that is in contact with the clay model or contaminated surface will remain gummy or uncured. Make sure to test cure the rubber on your surface before full-scale application.

Use a polyurethane or tin-cured mold rubber if you know that you'll be working with any of these inhibitors.





Liquid Casting Plastics

Great for cold cast bronze!



EasyFlo 60 Liquid Plastic

- 1A:1B Mix Ratio [by volume]
- Often mixed with Bronze Powder to make cold cast bronze parts
- 2 to 2.5-Minute Pour Time
- 15 to 30-Minute Demold Time
- Easily color with *PolyColor Dyes* or add dry fillers
- For brush-on application, thicken with *PolyFiber II*
- For a transparent amber version of this product, consider *EasyFlo Clear Liquid Plastic*. For a similar plastic with a longer working time, consider *EasyFlo 95 Liquid Plastic*.



EasyFlo 120 Liquid Plastic

- 1A:1B Mix Ratio [by volume]
- Often used for slush casting or rotocasting to produce lightweight, hollow castings
- 2 to 2.5-Minute Pour Time
- 15 to 30-Minute Demold Time
- Backfill hollow parts with casting foam
- Easily color with *PolyColor Dyes* or add dry fillers
- For brush-on application, thicken with *PolyFiber II*



Use for rotocasting & slush casting

Poly 1511 Liquid Plastic

- 1A:1B Mix Ratio [by volume]
- Thicken with *PolyFiber II* to make mold shells
- 10-Minute Pour Time
- 30 to 60-Minute Demold Time
- Easily color with *PolyColor Dyes* or add dry fillers
- For a sprayable mold shell plastic, consider *EasyFlo Spray FR*



Accessories

Release Agents & Sealers

- **Pol-Ease® 2300 Release Agent:** Silicone-based, aerosol spray for use on non-porous or sealed models. Use on models when making polyurethane rubber molds or when casting polyurethane plastic in polyurethane rubber molds.
- **Pol-Ease® 2500 Release Agent:** Aerosol spray release agent that can be washed off of models and castings; good option when castings need to be painted. Use on models when making silicone rubber molds.
- **Poly PVA Solution:** Water-soluble sealer for porous models. Available in clear and green.
- **PolyCoat Sealer & Release Agent:** Semi-permanent, silicone-based sealer and release agent. Apply to models when making polyurethane and platinum silicone rubber molds. Not recommended for use with tin silicone systems.
- **Pol-Ease® 2650 Release Agent:** Silicone-free, oil-based release agent designed for use when casting concrete or plaster in polyurethane rubber molds.

Bronze Powder

- Use with Polytek liquid casting plastics to make cold cast bronze parts
- 325 mesh

Color

- Use **PolyColor Dyes** to color Polytek polyurethane rubbers and plastics. Available colors: black, brown, blue, green, red, yellow, fleshtone and white.
- Use **Silicone Color Pigments** to color Polytek silicone rubbers. Available colors: fleshtone, black, yellow, red, green, white, and blue.





Polytek® Mold Making & Casting Materials for Sculptors & Foundries

www.polytek.com | 610.559.8620 | 800.858.5990 | sales@polytek.com |   