

Mold Release Concentrate - Technical Memo

SOLUTION:	120 ml	120 ml X 6
Mold Release Concentrate	Part 1246A	Part 1246A

Additionally Needed:

Alcohol, Ethyl Denatured, 100%	Part 10841	or	Alcohol, Isopropyl, ACS, 100%	Part 12094
Base Molds, Stainless Steel	Part 5104			
Base Molds, Disposable	Part 5105			

For storage requirements and expiration date refer to individual bottle labels.

APPLICATION:

Newcomer Supply Mold Release Concentrate, when diluted to a working mold release solution, facilitates the clean release of cooled, solidified paraffin embedded tissue blocks from tissue embedding base molds.

METHOD:

Solutions: All solutions are manufactured by Newcomer Supply, Inc.

PROCEDURE:

- Dilute Mold Release Concentrate to a Mold Release Working Solution following exact recommended proportions. Combine solutions in a plastic spray bottle and mix well;
 - Mold Release Concentrate 5 ml
 - Ethyl Alcohol or Isopropyl Alcohol 95 ml
 - Store unused Mold Release Working Solution at room temperature for up to 6 months.
 - Keep working solution tightly capped when not in use.
- Arrange clean and dry stainless steel base molds (5104) or plastic disposable base molds (5105) on paper towels or laboratory bench paper in an adequately ventilated area; preferably under a fume hood.
 - See Procedure Note #1.
- Spray all embedding base molds thoroughly with Mold Release Working Solution, allowing small beads of solution to form on all embedding base mold surfaces that will come in contact with paraffin.
 - See Procedure Note #2.
- Allow embedding base molds to thoroughly air dry prior to use.
 - Evaporation process will leave Mold Release adhered to embedding base molds, allowing easy removal of cooled embedded tissue blocks.
 - Thorough drying of treated embedding base molds will alleviate problems with tissue sectioning that could occur with wet base molds and carry over of Mold Release Solution mixing with paraffin.
- Embed paraffin processed tissue in appropriate size embedding base molds that have been Mold Release treated and dried.
- Cool paraffin blocks on embedding center cold plate.
- After paraffin has completely solidified, cooled embedded tissue blocks will easily and completely separate from embedding base molds.
 - See Procedure Note #3.
- Repeat treatment of clean and dry base molds with Mold Release Working Solution on a routine basis according to laboratory protocol.

PROCEDURE NOTES:

- If plastic disposable base molds are reused multiple times, the use of Mold Release Working Solution will assist with easier block release.
- Spraying embedding base molds provides a better adherence of Mold Release and is preferred over soaking base molds in the solution.
- On occasion when embedded tissue blocks may be difficult to remove from embedding base molds, a sharp tap of the embedding base mold on the bench top will facilitate removal.

REFERENCES:

- Sheehan, Dezna C., and Barbara B. Hrapchak. *Theory and Practice of Histotechnology*. 2nd ed. St. Louis: Mosby, 1980. 66.
- Modifications developed by Newcomer Supply Laboratory.