



“YOU SUPPLY THE TALENT... WE’LL SUPPLY THE REST!” THE COMPLEAT SCULPTOR

EasyFlo™ Series

POLY URETHANE LIQUID PLASTICS

Super Low Viscosity Casting Resins, Pour Like Water, Set Fast

FEATURES:

Easy 1:1 mix, by volume	Rapid demold
Extremely low viscosity	No pre-stirring of A or B necessary
Reproduces finest detail	Tough, non-brittle formula
Excellent bubble release	Accepts high filler levels readily
Reduce need for pressure or vacuuming	

PHYSICAL PROPERTIES:

Mix ratio, by volume	1A to 1B
Mix ratio, by weight	100A to 90B
Hardness, Shore D	65
Pour time, 1 lb. mix (faster with Part 15X)	2 - 2 1/2 min.
Demold time (faster with Part 15X)	15-30 min.
Specific gravity, g/cc (mixed)	1.03
Color, cured	White
Initial Mixed Viscosity - EasyFlo™ 60	60 cps.
EasyFlo™ 120	120 cps.
Specific Volume, cu. inches/pound	26.9
Maximum Exotherm - EasyFlo™ 60	110oC (230°F)
EasyFlo™ 120	94oC (200°F)

USES: EasyFlo™ liquid plastics are useful for casting decorative objects, production parts, tools, models, patterns, fixtures, duplicate masters and more. Extremely low viscosity provides for easy mixing, excellent detail penetration and the most bubble-free castings without employing vacuum degassing and pressure casting techniques. A rapid demold time makes EasyFlo™ ideal for high volume, fast cast applications. EasyFlo™ products can be easily filled for various cold-cast techniques such as cold-cast bronze, marble, etc. Use EasyFlo™ 60 when lowest viscosity is needed for solid pours. EasyFlo™ 120 is best for rotocasting or slush casting to create hollow parts. Both products can be easily color-cast or painted. Thin-walled castings made from EasyFlo™ have surprising strength and lack the brittleness typical of other low viscosity, fast polyurethane resins.

MOLD PREPARATION: EasyFlo™ reproduces minute detail from a mold or pattern but may stick or foam when poured on improperly prepared surfaces. A trial casting on a surface finish similar to the final mold should be made to avoid damaging a valuable mold. Polyethylene and silicone rubber molds, such as the TinSil® 70 and PlatSil® 71 Series, do not require a release agent, but a barrier coat may be helpful. Latex, polyurethane rubber or metal molds must be dry and require a coat of a suitable release agent, such as Pol-Ease® 2300. A good polyurethane mold rubber is any of the Poly 74 Series.

ADDITIVES: Part15X accelerator and Part F foamer should be stirred into the Part B before adding A. Fillers should be added after A and B are mixed. Part X is a powerful catalyst to increase the speed of curing. A few drops in a one pound mix speeds the cure significantly. Exotherm (heat of reaction) and thus shrinkage on cooling is increased. Experiment to determine the right amount of Part X to use but never use more than 1% Part X of the total weight of the mix or the final physical properties may be affected. Part F can be added to EasyFlo™ Part B's at levels not to exceed 1% by weight. Microballoons can be added to create a wood-like, lower density material. Bronze powder, calcium carbonate, fly ash, sand, granite or other stone-like fillers can be added as desired. It is imperative that any filler be thoroughly dried before mixing with resin.

MIXING: Prior to mixing, all molds and equipment must be prepared. Parts A and B should be above 60°F. Once the containers of Parts A and B are opened, they should be used or resealed tightly as atmospheric moisture contamination may cause foaming of the plastic. Metal or plastic mixing vessels and spatulas should be used to avoid introducing moisture with paper or wood tools. Measure or weigh Parts A and B into a mixing container. Polyethylene buckets are excellent and can often be reused. Mix immediately, thoroughly scraping sides and bottom for one minute. Pour mix into cavity as quickly as possible.

CURING: Castings should be allowed to remain in the mold until thoroughly cured. Parts demolded too soon may be subject to deformation. Use of pre-warmed molds will hasten curing. Low temperatures will slow the curing and extend demold time.

FINISHING: Cured EasyFlo™ products will yellow slightly and chalk when exposed to sunlight and should be painted or sealed for exterior use. Castings can be drilled, sanded and machined. If they are to be painted or coated, adhesion of the coating should be checked carefully over a period of time to determine that it is satisfactory for the intended use. If all mold release is removed by detergent washing, most oil paints work well.

CLEAN UP: Tools should be scraped clean before the plastic is hard. Alcohol (shellac thinner), acetone or MEK are good cleaning solvents, but are highly flammable. Work surfaces can be waxed or coated with Pol-Ease® 2300 Release Agent so hardened resin can be removed.

STORAGE LIFE: At least six months in unopened containers at room temperature (60-90°F).

WARNING: Uncured compounds may cause skin or respiratory irritation or sensitization if improperly handled. Avoid skin and eye contact with the uncured material. If skin contact occurs, remove with waterless hand cleaner or alcohol then soap and water. In case of eye contamination, flood with water and call physician. Use only with adequate ventilation. Small amounts of vapor may be generated during the gelling process. These vapors will safely dissipate in a properly ventilated room. If there is any doubt about adequacy of ventilation, a respirator with air purifying cartridges for organic vapors should be worn. Poly Plastics are not to be used where food or prolonged body contact may occur. Poly Plastics burn readily when ignited. Care should be taken with sanding dust and other easily ignitable forms of these products. Read MSDS and container labels prior to use.

Disclaimer: The information in this bulletin and otherwise provided by Polytek is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained by the use thereof, or that any such use will not infringe any patent. Before using, the user shall determine the suitability of the product for the intended use and user assumes all risk and liability whatsoever in connection therewith.

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