



Gammacril®

Processing and maintenance notices of the cast acrylic rods Gammacril®

P.M.M.A. is a “thermoplastic material”, this means it appears rigid and homogeneous in room temperature, while becomes plastic after an enough high heating. Its hardness is classified between the wood and the iron ones, for this reason rather similar to the soft metals one, like brass, aluminium or other light alloys. P.M.M.A. is consequently suitable to be processed either with wood working machines, especially for the cutting, or with metal working machines, particularly for the turning, drilling, milling. However you need to pay attention to some shrewdnesses, to avoid the formation of abnormal heatings on the surfaces of the processing pieces, which should cause some fissures or crazes. They are: well sharp tools, good removal of machining-shavings, possible water or air cooling, to avoid a too high overheating. P.M.M.A. can be glued with cements suitable on purpose to the acrylic, and they can be found in two different types: solvents or by polymerization. The first ones are usually in only one component with a rather low rate of solvent, which evaporating during the setting it causes the adhesion of the pieces. They are suggested for glueing pieces in little dimensions or where little setting is needed. The second ones are composed by two or more components, which the most important has a basis of methacrilate polymer, which with the action of catalytic agents polymerizes producing a joint among the pieces. They are suggested for glueing pieces in big dimensions or where strong setting is needed. However we dissuade for using generic glues for plastic materials.

Due to its characteristics P.M.M.A. can be easily thermoformed with the help of few means. Heated at a temperature of 150-160°C in an oven with hot air circulation or with infrared rays radiant heating, it softens and becomes plastic and, by compression, stretching or bending in special dies, gives the possibility to create a wide range of shapes. Cooling it gets back to its starting hardness keeping the given shape, and letting unchanged all its other characteristics.

The cleaning of the acrylic rods must be done only with soap and water, or other detergent without abrasives. To fight the natural attitude of acrylic to attract the dust, due to its electrostatic charge, it could be useful to clean the surfaces with a soft cloth imbued with antistatic fluid once a month. Besides it should be necessary to stock the rods in a horizontal position and far from heat sources, to avoid possible deformations.

Will you please contact our technical department for any further problem or information.