

## Tekna<sup>®</sup> 850 series

The Tekna 850 group of products offers a versatile range of hybrid resin systems. The resin portion of the system is an epoxy acrylate, an unsaturated monomer, offering excellent mechanical properties and chemical resistance. This epoxy acrylate is subjected to free radical initiation to polymerize and simultaneously co-react with a polymeric isocyanate to form a urethane. This gives improvements in impact resistance and operating temperature capabilities. The Tekna 850 series of hybrid resins bond well to reinforcements such as glass, carbon and aramid fibers, and can be further modified by the addition of compatible polyols to further increase impact resistance.

### Properties from clear castings of the base Tekna 850 series polymer hybrid.

Physical Property	Value
Flexural strength-psi	20,300
Flexural modulus-psi	4.65 x 10 <sup>5</sup>
Tensile strength -psi	10,150
Tensile modulus-psi	4.93 x 10 <sup>5</sup>
Tensile elongation-%	2.5
Heat deflection temperature (HDT)	410° F
Barcol hardness at 77°F	45

Tekna 850 series hybrids are new materials. Due to the very special properties available with Tekna 850 hybrids, fast controllable reaction times, excellent physical properties, elevated temperature and chemical resistance, these hybrids are ideally suited to demanding applications. These materials can be processed by RTM, vacuum bagging, open molding, pultrusion, compression molding, and casting.