

Figure 1 compares the stiffness of cutlery made from the new formulation with PS and PP cutlery. PS cutlery is typically stiff but too brittle, while PP cutlery is typically strong yet too flexible. In contrast, the new Natur-Tec formulation is both stiff and strong.

**Figure 1**

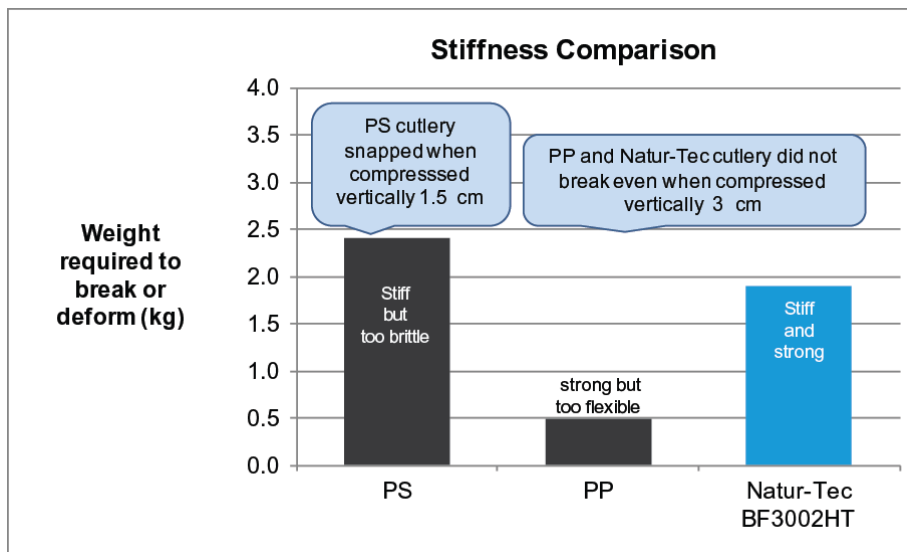


Figure 2 demonstrates the new formulation's higher toughness (requiring more energy to break) than both PS and PP.

**Figure 2**

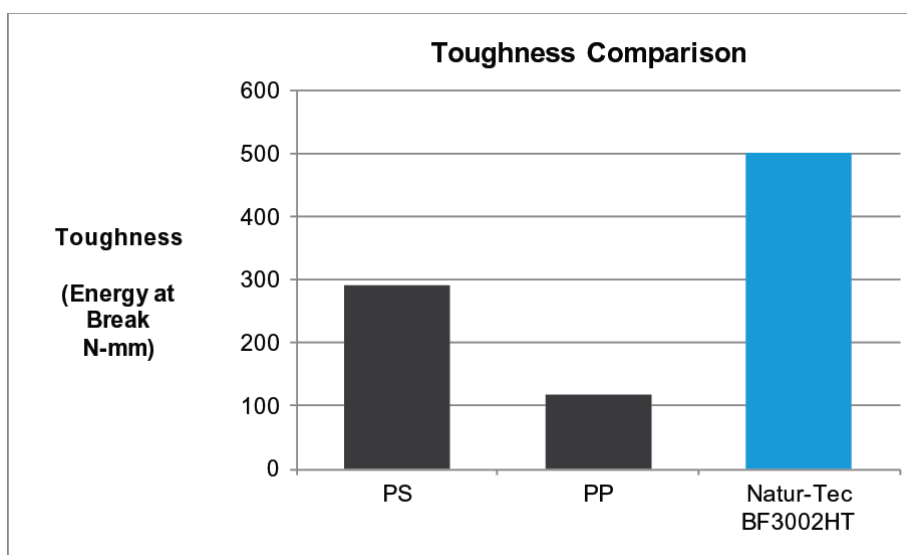


Figure 3 indicates that in heat resistance testing the force required to deform the new Ingeo-based formulation cutlery at 190° F (90°C) is more than PP but less than PS. At a maximum compression load of 200 grams (~ ½ lb) however, the new formulation exceeds the toughness requirements for most, if not all, serviceware applications.

**Figure 3**

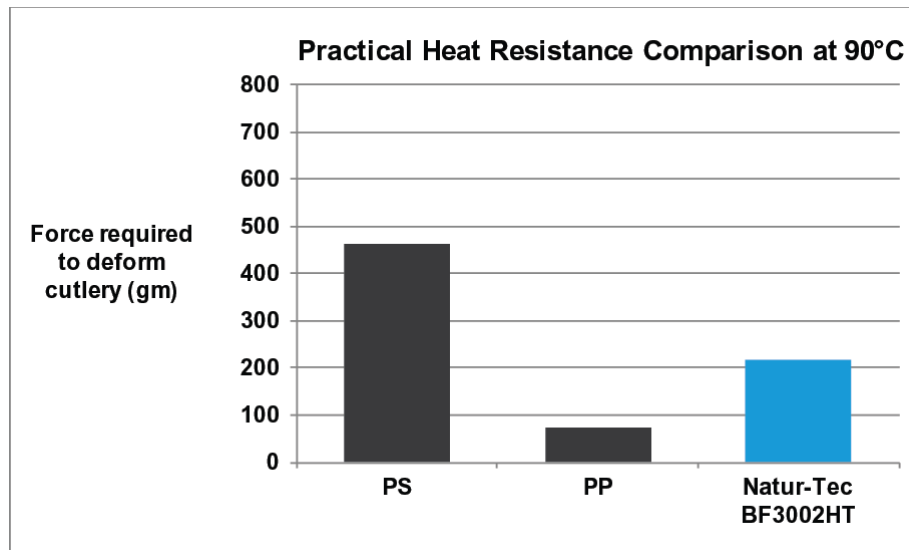


Figure 4 shows the substantial deformation on handle and bowl of the PS spoon, right, compared to the pristine shape of the Ingeo-based spoon, left, after being compressed in hot water.

**Figure 4**

