

PolyCrumb® Composite E03XA-A02 Technical Data Sheet

a NeoCrumb LLC product

Key Characteristics

PolyCrumb composite E03XA-A02 is designed for extrusion applications. E03XA-A02 offers an excellent balance of properties where the requirements are high impact performance and flexibility. See table below for typical properties.

E03XA-A02 is a composite material from tire derived crumb rubber and polypropylene. PolyCrumb meets the requirements as a thermoplastic Elastomer because of the molecular bond that is achieved without the introduction of bonding agents, accelerants or catalysts. E03XA-A02 is recyclable and is compounded from 100% recycled material. The tire derived crumb rubber within PolyCrumb is not simply a filler, but rather enhances many of the mechanical properties of the polymer with which it is bonded, thus enabling it to match the characteristics of more expensive polymers.

PHYSICAL	ASTM	UNITS	E03XA-A02
Melt Flow Rate	D1238	g/10 min	9.00
Density	D792	g/cc	1.0225
MECHANICAL			
Tensile Strength	D638	psi	1387
Yield Elongation	D638	%	21.07
Break Strength	D638	psi	1327
Break Elongation	D638	%	26
Flex Modulus	D790	kpsi	62
Flex Strength	D790	psi	1719
IMPACT			
Notched Izod	D256	ft-lb/in	3.07
Hardness, Shore D	D2240		50.4

Applications

The types of products that have been made from various PolyCrumb products include automotive components, building materials and durable goods.

E03XA-A02 is suited for sheet extrusion of various thicknesses with excellent vacuum forming applications.

Processing Information

All PolyCrumb products should be molded at lower temperatures than conventional polymers (approximately 75°F/23.9°C to 100°F/37.8°C); which provides energy savings, decreases cooling time, and therefore reduces cycle times.

PolyCrumb products exhibit less shrinkage than conventional polymers, resulting in reduced trimming time, which also decreases the cycle time. In addition, PolyCrumb does not need pre-treatment for painting and coating.