



PolyCrumb® Composite C03XA-B01, D03XA-B01, E03XA-B01 Technical Data Sheet

a NeoCrumb LLC product

Key Characteristics

PolyCrumb C03XA-B01, D03XA-B01, and E03XA-B01 are designed for injection molding applications. C03XA-B01, D03XA-B01, and E03XA-B01 offer an excellent balance of properties where the requirements are high impact performance and flexibility. See table below for typical properties.

C03XA-B01, D03XA-B01, and E03XA-B01 are composite materials 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. C03XA-B01, D03XA-B01, and E03XA-B01 are recyclable and are 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	C03XA-B01	D03XA-B01	E03XA-B01
Melt Flow Rate	D1238	g/10 min	22.05	18.00	14.55
Density	D792	g/cc	0.9791	0.9985	1.0181
MECHANICAL					
Tensile Strength	D638	psi	2376	1912	1545
Yield Elongation	D638	%	9.77	10.55	10.79
Break Strength	D638	psi	2341	1869	1522
Break Elongation	D638	%	11	12	12
Flex Modulus	D790	kpsi	98	83	67
Flex Strength	D790	psi	3115	2586	2085
IMPACT					
Notched Izod	D256	ft-lb/in	1.24	1.38	1.45
Hardness, Shore D	D2240		60	57	53

Applications

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

C03XA-B01, D03XA-B01, and E03XA-B01 are suited for garden furniture and accessories, reusable containers, sewage and water drainage systems, truck bed liners, automotive body parts and office furniture to name a few.

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.