



FACT SHEET

INHANCE[®] Si-8000 Series Polymer Alloy

Product Description: INHANCE Si-8000 series polymer alloy consists of black, medium density, silicon carbide chemically modified for greater adhesion. This product was designed for alloying with various polymer materials such as epoxy, polyurea, polyurethane etc. When incorporated in polymers, unique grades of high-performance polymeric composites are formed that have exceptional abrasion-resistance and wear performance. Frequently these composites have abrasion resistance greater than metal. They are also are light weight, non-corroding, and electrically non-conductive.

Grades Available:

- INHANCE Si-8220, INHANCE Si-8500, and INHANCE Si-8900

Applications: Ideal applications include wear resistant parts that can be molded for severe-service in mechanical or chemical environments, where repair/replacement of worn parts is very costly because of down time, and where optimal performance is needed. Examples include belt wipers, mining components, impact resistant products, screens, dumping pads, chute liners, valve seats, piston rings, gears, wear-plates, guide-rails, cable (protective jacketing), steel replacement parts, and high performance coatings.

Physical Characteristics: INHANCE Si-8000 is a free flowing, black, prealloyed powder with the following general properties.

Grades	Si-8220	Si-8500	Si-8900
Shape	Blocky, with sharp edges	Blocky, with sharp edges	Blocky, with sharp edges
Particle size (average)	67 μ	25 μ	4 μ
Specific Gravity	3.2	3.2	3.2
Bulk Density	1.38 g/cc 0.05 lb/in ³	1.28 g/cc 0.046 lb/in ³	1.38 g/cc 0.05 lb/in ³
Knopp 100 Hardness	2450	2450	2450

Suggested Loading: 5-30% by weight

Standard Packaging:

30 or 40 lb. plastic pails with polybag insert.

Call Sales for other custom sizes