



# Cenosphere Properties

Series	Grade	Particle size Range (µm)	Bulk Density (g/cc)	True Density (g/cc)	Crush Strength (psi) 90% survival	Color	% Alumina (AL <sub>2</sub> O <sub>3</sub> )
EconoStar	ES-106	< 106	0.32-0.45	0.85 – 0.95	3200	Light Gray	22.0-30.0
	ES-160	< 160	0.32-0.45	0.85 – 0.95	3200	Light Gray	22.0-30.0
	ES-200/600	200-600	~ 0.35	< 0.98	2900	Light Gray	22.0-30.0
	ES-300	< 300	0.32-0.45	0.85 – 0.95	3200	Light Gray	22.0-30.0
	ES-500	< 500	0.32-0.45	0.85 – 0.95	3200	Light Gray	22.0-30.0
	ES-500-86	< 500	0.32-0.45	< 0.86	3200	Light Gray	22.0-30.0
	ES-500-75	< 500	0.32-0.45	< 0.75	3200	Light Gray	22.0-30.0
China White	CW-106	< 106	0.32-0.45	0.85 – 0.95	3200	White, HW 72-74	32.0-40.0
	CW-160	< 160	0.32-0.45	0.85 – 0.95	3200	White, HW 72-74	32.0-40.0
	CW-300	< 300	0.32-0.45	0.85 – 0.95	3200	White, HW 72-74	32.0-40.0
High Alumina	HAL-106	< 106	0.32-0.45	0.85 – 0.95	3200	Light Gray	32.0-40.0
	HAL-160	< 160	0.32-0.45	0.85 – 0.95	3200	Light Gray	32.0-40.0
	HAL-300	< 300	0.32-0.45	0.85 – 0.95	3200	Light Gray	32.0-40.0
LightStar	LS-106	< 106	0.32-0.44	0.85 – 0.95	3200	White HW 68-70	28.0-34.0
	LS-300	< 300	0.32-0.44	0.85 – 0.95	3200	White HW 68-70	28.0-34.0

Above are Cenostar's standard grades displaying typical properties. Cenostar can provide alternative grades with altered properties of any spec requested. Cenostar sources directly from multiple powerplants that allows us to acquire an assortment of grades. This direct relationship with the source gives Cenostar the ability to offer customers the same product from the same source, every shipment.

The Information herein is accurate to the best of Cenostar's knowledge. Before using, user should test properties and user assumes the risk and liability in connection therewith.