



FACT SHEET

INHANCE[®] UH-1000 Series Particles

Product Description: INHANCE UH-1000 series particles are surface-activated Ultra High Molecular Weight Polyethylene (UHMWPE)[†] in powder form. Surface activation makes the particles easy to disperse, and creates superior adhesion between the particles and the surrounding polymer. INHANCE UH-1000 series particles are available in the following standard sizes:

<u>Grade</u>	<u>Avg. Size (by wt)</u>	<u>Finer than (By wt)</u>
UH-1045	300 Microns (μ)	710 Microns (μ)
UH-1080	125 Microns (μ)	500 Microns (μ)
UH-1250	53 Microns (μ)	150 Microns (μ)
UH-1500	45 Microns (μ)	90 Microns (μ)
UH-1700	38 Microns (μ)	75 Microns (μ)
UH-1900	10 Microns (μ)	38 Microns (μ)

Applications: Add INHANCE UH-1000 series particles to polyurethanes, epoxies, rubber, and other polymers to create composites that capture the unique benefits of UHMWPE without the processing difficulties posed by virgin UHMWPE. These benefits include superior abrasion resistance, reduced coefficient of friction, enhanced work of fracture and improved moisture barrier. Numerous industrial parts, coatings, and other wear surfaces are now being made with these surface-activated particles. Typical incorporation levels are in the range of 10%-30% for cast parts and 5%-10% for coatings.

Physical Characteristics: INHANCE UH-1000 series particles are free flowing white particles or powder. It is derived from virgin UHMWPE resin, and has the following general properties:

- Surface Energy: 55+ dynes/cm (water wettable)
- Specific Gravity: 0.93 - 0.94
- Bulk Density: 20-31 lb./ft³(0.32-0.50 g/cc)
- Molecular Weight: 3,000,000 – 5,000,000

Standard Packaging:

- 50 lb. cardboard box with polybag insert
- 200 lb. fiber drum with polybag insert (150 lb for UH-1700 and UH-1900)
- Call Sales for other sizes

[†] May contain up to 1.0% parting and neutralizing agent.