Liquid Ion Solutions (DBA RoCo®)
1816 Parkway View Drive, Bldg. 18
Pittsburgh, PA 15205

TECHNICAL DATA SHEET

Product Name	Flexible Polyurethane Ground Powder
Product Description	Surface-engineered functional additive powder derived from post-consumer flexible polyurethane mattress foam. Produced via proprietary mechanical grinding with controlled grinding time, temperature, and gas perfusion (N_2 or CO_2), resulting in customizable particle size and surface chemistry.
Recommended Use	For use as a functional additive across multiple industries. Applications testing has been completed or in process for the following uses: • Non-structural construction materials • Acoustic paneling • Rigid foams • Cementitious mixtures • Flexible foams Loading at 5-20% by volume results in improved thermal insulative properties, lightweighting, curing time, noise frequency modulation, and noise dampening.

Typical Properties (not a specification)

Property	N_2-processed	CO_2-processed
Appearance	Off-white to beige powder; irregular particles	
Bulk density (g/cc)	0.175 ± 0.003 (typ.)	0.140 ± 0.002 (typ.)
Mean particle size (µm)	~167 ± 2 (typ.)	~176 ± 2 (typ.)
Thermal decomposition onset (TGA, °C)	First: 245 – 254 Second: 336 – 346	First: 245 – 254 Second: 338 – 345

Note: Typical properties are shown for ground powder processed under either N_2 or CO_2 for 360 seconds at 60°C

Handling & Storage	Handle as a fine powder. Minimize dust generation and use appropriate PPE (safety glasses, gloves, dust mask). Store in a sealed container in a cool/dry environment. Safety Data Sheet (SDS) available upon request.

Certificates of Analysis with particle size and processing conditions available. Please contact RoCo® for ground foam powder processed under customized processing conditions.