

PolyMag Plastic Additives

Enable X-ray & Metal Detectability

PolyMag® Plastic Additives enable plastic and rubber components to be detected by both metal detectors and X-ray inspection systems. By converting traditionally undetectable polymers into inspectable materials, PolyMag helps processors meet global food-safety and retailer requirements and prevents foreign material contaminants from reaching the consumer.

As a leading manufacturer of magnetic separators, metal detectors and X-ray inspection systems, Eriez can assist you with the level of detectability required by different food processing applications and we can provide an analysis of your product's inspection signature.

Meeting & Exceeding Modern Safety Standards

Major food brand owners, retailers, and restaurant chains require food processors to employ plastic and rubber articles that are Metal and X-ray detectable in order to prevent physical contamination like glass, metal, wood, plastic, and rubber from entering the market. This has become part of many companies' HACCP (Hazard Analysis Critical Control Point) programs.

The FDA considers physical contaminants greater than 7 mm (0.275") in length to present a hazard. Growers, packers and food processors are using their existing metal detectors and X-ray inspection systems with detectable plastics to prevent plastic contaminated foods from reaching consumers.

Product molders — such those used by agricultural and food processors — can satisfy varying levels of detectability at a cost substantially less than specialty compounds. This eliminates the need to buy larger minimum quantities of special resins and carry excess material inventory.

Independent laboratory testing and the FDA have offered favorable opinions of our PolyMag Additives for food contact compliance.



Features

- EU and FDA-compliant
- Enables parts to be detectable by metal detectors and X-ray systems
- Included at 5% to 25% loadings in moldings and extrusions high-contrast X-ray grades available
- Compatible with standard production resins
- Supports color coding for visual identification
- Available for plastics, silicone, rubber, urethane, and foam (application dependent)

Applications

- Cable Ties
- Conveyor Belts
- Ear Plugs
- Elevator Buckets
- Gaskets
- Pallets & Totes
- Pens and Markers
- Scoops & Shovels
- Scraper Blades
- Sifter Cleaning Balls & Sliders
- Tags & Labels

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PolyMag Beige XRD is preferred for plastic and rubber applications that require a high level of X-ray contrast. Molders can include both the PolyMag HSCP and XRD masterbatch additives to impart Metal Detectability and an even higher level of X-ray contrast in plastic and rubber parts.

Model	Color	Primary Use	Stainless Steel Content	Carrier	Bulk Density	Ash Content	Moisture Content	Packaging
XRD	Beige	Polymers (X-ray detectability)	0*	Ethylene Copolymer	1,040 +/- 130 kg/m3 (65 +/- 8 lbs/ft3) untapped	70% +/- 3	0.2% Maximum, drying not recommended	23 kg per bucket and 113 kg per drum
HSCP	Grey	Broad range of polymers (magnetic susceptibility, metal detection, X-ray contrast)	70% +/- 3%	Ethylene Copolymer	1,200 +/- 130 kg/m3 (75 +/- 8 lbs/ft3) untapped	70% +/- 3	0.1% Maximum, drying not recommended	9 kg per carton and 113 kg per drum
HSPC	Grey	Polycarbonate materials (magnetic susceptibility, metal detection, X-ray contrast)	60% to 66%	Polycarbonate	1,000 +/- 240 kg/m3 (62 +/- 15 lbs/ft3) untapped	60% to 66%	0.2% Maximum	18 kg buckets and 16 kg pails
HSNY	Grey	Nylon polymers (magnetic susceptibility, metal detection, X-ray contrast)	65% +/- 3%	Nylon 6	1,100 +/- 160 kg/m3 (69 +/- 10 lbs/ft3) untapped	65% +/- 3	0.6% Maximum	18 kg per bucket
HSPP	Grey	Various polymers (magnetic susceptibility, metal detection, X-ray contrast)	65% +/- 3%	Polypropylene Copolymer	1,090 +/- 130 kg/m3 (68 +/- 8 lbs/ft3) untapped	65% +/- 3	0.1% Maximum	18 kg per bucket
HSU-ET	Grey	TPU polymers (magnetic susceptibility, metal detection, X-ray contrast)	80% +/- 4%	Thermoplastic Urethane	1,300 +/- 160 kg/m3 (80 +/- 10 lbs/ft3) untapped	80% to 87%	0.3% Maximum	23 kg per bucket

*PolyMag XRD contains 70% +/- 3% Barium Sulfate.

Note: All product specifications, statements, information, and data are subject to change.

ERIEZ
GLOBAL LEADER IN SEPARATION TECHNOLOGIES

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