

RNG PE-HT™
Description

RNG PE-HT is an engineered EPS (Enhanced Polymeric Structure) resin used in the manufacture of most high clarity PE products that are processed at temperatures up to 550°F (287°C).

RNG PE-HT is suitable for use in blown and cast film extrusions, thermoforming, injection molding, compression and blow molding, and spinning operations.

RNG PE-HT is available in the U.S. and S.E. Asia. Its EPS properties are designed to produce plastics compatible with disposal in EPA-regulated landfills. It's a versatile resin, soluble in most PE polymers.

Applications

- Films
- Fibers
- Containers
- Bottles
- Caps

Materials

- Blown films
- Rigid sheets
- Netting
- Spunbond materials

Regional availability

- North America (U.S., Canada, and Mexico)
- Southeast Asia

Representative properties

RNG PE-HT is a versatile EPS resin made for use in digital blenders.

Density	0.95 g/cm ³ (ASTM D7792)
Melt flow index	7g/10 min (190 °C/2.16 kg) (ASTM D1238)
Melt temperature range	97°C (ISO 11357-3)
Moisture	≤ 0.25% (ASTM D6980)

Key attributes

- FDA food-contact compliance (21 CFR 177.1340)
- Excellent homogeneous dispersion
- Negligible effect on optics or product performance

Processing, letdown

- RNG PE-HT is blended in at a 1/2% load **unless otherwise specified** to meet EPA requirements
- Polymer extrusion and converting requires negligible changes
- Co-extruded polymers – blend the equivalent of the required percentage of RNG PE-HT in each layer unless otherwise specified
- Maximum processing temperature is 550°F (287°C)
- Compatible with mined CaCO₃ (limestone)

Warnings

Do NOT use in plastics containing these products:

- Oyster and shellfish CaCO₃, coral, eggshells, bone meal
- Bio fillers, organic fibers, cellulose (poly/paper laminates are OK)
- Oxo additives
- Silicones

Technical Data Sheet

RNG PE-HT™

Product packaging

RNG PE-HT is available in a unitized pallet of 25 kg (55 lbs.) bags or 800 kg (1764 lbs.) gaylords or super sacks.

Bags, gaylords, and sacks are sealed, moisture-resistant, and ready to use as supplied.

Storage and handling

RNG PE-HT should be stored indoors in the sealed container until used.

- Shelf life: 3 years from date of delivery.
- RNG PE-HT is thoroughly dried after production.
- If exposed to humid conditions for longer than one week, dry pellets by introducing warm dry air at no more than 80°C for 1-4 hours.
- If necessary, the estimated moisture content can be measured with an infrared moisture analyzer at 105°C for 10 minutes. The result from this test should be <0.25% moisture prior to processing.