

General Purpose Expandable Polystyrene with 30% Recycled Content

Product description:

The **RE441-E30** is part of the NexEco family of products. **RE441-E30** is NexKemia's General Purpose expandable polystyrene resin (EPS), containing 30% recycled content. This resin is designed for shape molding, high strength protective packaging and multi-use coolers. The pentane (blowing agent) concentration and resin size range provide optimal achievable EPS density targets from 1.15 to 3.0 pcf. The **RE441-E30** EPS material is best described as a traditional white polymeric resin in color, is slightly lentil in shape, and is produced by state-of-the-art extrusion equipment.

Applications:

RE441-E30 resin can be used in many applications including, but not limited to:

- Bio-Pharmaceutical insulated shippers
- Multi-use insulated coolers
- Agricultural containers
- Automotive & Appliance protective packaging
- Plus, many additional applications

To select the best product for your application, review the **NexKemia Product Chart** and contact your NexKemia representative.

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Technical Data:

NexEco Regular EPS	Typical Pentane Value (%wt.)	Unexpanded Beads Size Distribution (mm)	Recommended Expanded Density Range (pcf)
Regular Grades			
RE441-E30	4.5	0.40 – 0.85	1.15 – 3.00

Compliance & Documentation:

When properly manufactured, EPS finished goods produced with **NexKemia RE441-E30** resin comply with the following:

- REACH Directive for regulation of Substances of Very High Concern (SVHC)
- RoHS Directive for regulation of Heavy metals and specific flame retardant

Processing:

Pre-Expansion	Maturation Time	Molding
<ul style="list-style-type: none"> • Single pass expansion: to optimize pre-expansion and achieve a homogeneous density from bead to bead, a slower expansion rate is recommended. By optimizing the expansion cycle, the uniformity of the pre-expanded beads will help to provide more consistent and uniform molding. • Second pass: to achieve lower densities (<0.75 pcf) it is recommended that the RE441-E30 products be pre-expanded in two stages. 	<ul style="list-style-type: none"> • Aging times may range between 4 to 48 hours. The maturation time will vary according to the product used and the density targeted. Please contact your sales or technical representative for more details. 	<ul style="list-style-type: none"> • NexKemia RE441-E30 is designed to be molded with commercially available eps processing machinery (horizontal and vertical block molds and shape presses). • Customer recycled eps (i.e. regrind) may be added to the fresh material, up to 50% depending on the product grade used, the quality of regrind and the condition of the equipment involved

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General Information

Product Packaging

- All **Nexkemia EPS** materials are packaged in 1,000 Kgs. (2,205 Lbs.) Super-sacks. A typical full truckload shipment consists of 20 Super-sacks of eps material with a total delivered weight of 20,000 Kgs. (44,100 Lbs.) per truckload.

Safety and Handling

- Electrostatic discharges may be generated during the use and manipulation of any EPS product.
- All metallic equipment and machinery should be grounded in accordance with all local government safety ordinances.
- Only use spark-proof tools in all areas where EPS is stored and processed.
- NexKemia M Series products contain a flame-retardant additive and are not suitable for food contact applications
- For more information, refer to the NexKemia Safety Data Sheet (SDS) prior to use.
- Upon delivery, trailer and/or container should be opened and allowed to vent for a minimum of one hour before unloading.

Storage

All EPS materials should be:

- Stored in unopened containers in dry and well-ventilated areas. The recommended storage temperature range for EPS is 20-25°C (68-77°F).
- Protected against unsuitable weather conditions and direct sun light.
- Kept away from heat, sparks, flame, and other sources of ignition.

Shelf Life

- In order to attain and maintain the ideal product performance of NexKemia EPS, it is recommended to process all product materials within 12 months of the date it is shipped.
- Any opened containers should be closed properly to minimize excess air in the product bag and should also be processed within a short period time.

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