

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.

General Purpose Expandable Polystyrene with 30% Recycled Content

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

General Purpose Expandable Polystyrene with 30% Recycled Content

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.

Disclaimer: NexKemia reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof. As NexKemia cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. IN NO EVENT SHALL NEXKEMIA BE LIABLE FOR ANY DIRECT, INCIDENTAL, CONSEQUENTIAL, INDIRECT, STATUTORY, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOSS OF USE, LOSS OF TIME, SHUTDOWN OR SLOWDOWN COSTS, INCONVENIENCE, LOSS BUSINESS OPPORTUNITIES, DAMAGE TO GOODWILL OR REPUTATION, OR OTHER ECONOMIC LOSS, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE, AND EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR SUCH DAMAGES COULD HAVE BEEN REASONABLY FORESEEN. NEXKEMIA DOES NOT PROVIDE ANY WARRANTY FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES THAT THEY ARE OF MERCHANTABLE QUALITY OR THAT THEY CAN BE USED FOR ANY PARTICULAR PURPOSE.

Revised: August 2024





NexKemia

**24 Bellevue Street
Mansonville, QC
J0E 1X0 Canada
1.450.292.3333
1.877.559.2333
info@nexkemia.com**

EXPANDING A WORLD OF INNOVATION