



Product Data Sheet

SHAPE/PACKAGING GRADE

R625B

A 25% recycled content EPS resin

Features/Attributes:

- 25% Recycled Content
- Low Pentane
- Fast molding cycles
- Excellent Fusion/Part Strength
- Recyclable in PS recycle streams

Applications:

- General Purpose Packaging
- Coolers and Wine-Packs
- Medical/Pharmaceutical Shippers

Properties	Typical Values (English Units)	Typical Values (S.I. Units)
Product Properties:		
(B) Bead Size – avg. bead size diameter	0.033 inches	0.85 millimeters
Pentane Content (Avg.)	4.2% by weight	4.2% by weight
Bulk Density	38 – 40 pounds per cubic foot	608 – 640 grams per liter
Thermal Properties:		
Thermal Resistance (R-Value)	3.9- 4.2 per inch	-
Thermal Conductivity¹ (K-factor, Lambda) Foot (ft) British Thermal Unit (Btu) Degree Fahrenheit (°F) Degree Centigrade (°C)	0.240-0.210 Btu-in/(hr-ft ² -°F)	34.5-30.2 milli-Watts/(meters-° Kelvin)
Coefficient of Linear Expansion Inch (in) Centimeter (cm)	3.5 x 10 ⁻⁵ in/in/° F	6.3 cm/cm/° C
Maximum Continuous Service Temperature	175° F	80° C
Mechanical Properties:		
Flexural Strength (avg.) @ Break (1 pcf)	30 psi	207 kPa
Compressive Strength (avg.) @ 10% Strain (1 pcf)	14 psi	97 kPa

¹ The thermal conductivity of expanded polystyrene at an average temperature of 75°F (24°C) is lowest at 3.5 pounds per cubic foot (pcf). It rises slightly at lower density until about 1.5 pcf where it increases rapidly. The rate of increase is much less at higher densities:

8.0 pcf (128 g/l) → 0.269 Btu-in/(hr-ft²-°F) or 38.7 mW/(m-K)
12.0 pcf (192 g/l) → 0.276 Btu-in/(hr-ft²-°F) or 39.8 mW/(m-K)

NOVA Chemicals EPS

R625B

**Availability**

NOVA Chemicals expandable polystyrene (EPS) resins are produced at the Beaver Valley plant site (Monaca, PA) and are available in 2205 pound (1 metric tonne) bulk bags. The product type and batch number are clearly marked on each bag. Contact the NOVA Chemicals sales office in your region.

Quality and Environmental Management Systems

R625B resins are manufactured at an ISO 9001 and ISO 14001 registered facility.

Storage and Handling

Resin should be stored in a cool, dry place away from direct sunlight. This product can release pentane during expansion and molding. Pentane is a highly flammable gas in the presence of open flames, lit cigarettes, sparks, static electricity discharges, or heat. Prolonged or improper storage can result in deterioration of product properties. Care should be taken when handling and transferring product to prevent foreign matter contamination. The NOVA Chemicals' **Material Safety Data Sheet (MSDS)** and **EPS Storage and Handling Safety Guide** contain important safety information and should be reviewed before using the product. These and additional safety and health information are available on our [Product Care](#) webpage.

Processing Conditions**Recommended Conditions:****Minimum Density:**

Batch pre-expander:

- 1.20 pounds per cubic foot or 19 grams per liter

Pre-puff age time:

4-48 hours – depending on pre-expanded density and method of bead pre-expansion.

Comprehensive assistance with processing conditions and Technical Services are available from NOVA Chemicals Styrenics Technology Center.

Environmental Information

R625B Resin with EcoSix™ recycled resin contains 25% of RAPAC EcoSix™ resin, which is certified by Scientific Certification Systems to be 100% recycled content.* For more information about the certification visit www.scscertified.com.

NOVA Chemicals EPS resins are biologically and chemically inert. NOVA Chemicals EPS resins do not contain CFC's (Chlorofluorocarbons). NOVA Chemicals EPS resins are recyclable.



♻️ is the SPI resin code for polystyrene to identify material type for sorting and recycling. Significant information regarding EPS recycling is available from the [EPS Industry Alliance](#). Where recycling of EPS resins is not possible, disposal to landfill or incineration in accordance with applicable laws and regulations is recommended. Contact NOVA Chemicals Styrenics Technology Center for further information on recycling and disposal.

NOVA Chemicals is a proud member of EPS Industry Alliance. For additional EPS information please visit: <http://epsindustry.org/>

www.novachemicals.com

EPS Sales and Manufacturing

NOVA Chemicals, Inc.
400 Frankfort Road
Monaca, PA 15061
Phone: 724.774.1000
Fax: 724.770.6701

Latin America Sales

Telephone: 724.770.5603
Fax: 724.770.6701

Asia and Pacific Rim Sales Office

NOVA Chemicals (International) S.A.
The Executive Centre
Level 42, Six Battery Road
Singapore 049909
Phone: 65.6224.8807
Fax: 65.6224.1877

Technical Center

NOVA Chemicals Performance Styrenics Technology Center
400 Frankfort Road
Monaca, PA 15061
Phone: 724.774.1000
Fax: 724.770.5535

*Certified recycled content sources include some pre-consumer and some post-consumer recycled content sources.

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