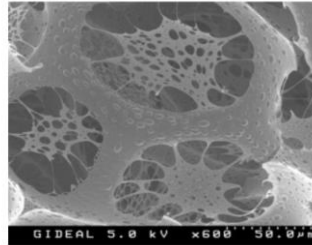


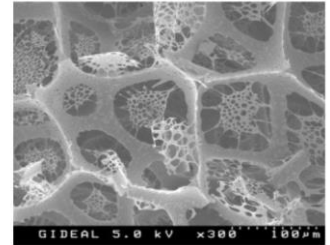


SMITHERS-OASIS

ENGINEERED PRODUCTS



Close-up of closed-cell phenolic foam



Close-up of open-cell phenolic foam

DATA SHEET

Engineered Products



Benefits:

- Can be molded into different shapes and sizes with ordinary working tools
- Excellent strength to density relationship
- Impressionable foam for medical and packaging applications
- Self-extinguishing and exhibits fire retardant properties
- Excellent as thermal insulation
- Capable of meeting international building regulation requirements
- Non-flammable, but will support combustion by direct contact with open flame or exposure to temperature in the range of 315°C (600°F)
- Can be used as a filter in carbon molecular sieve manufacturing
- Can be carbonized

Applications:

- Floral foam
- Dry foam
- Universal and Hazmat absorbent
- Nitrogen filters - separating nitrogen and oxygen
- Sound absorber - reducing reverberation and ambient noise
- Foam insulation
- Molding and milling foam
- Props, 3D signs, sculptures and other shapes by CNC or hand
- Hydroponic growing media for propagation and production



- Packaging foam
- Cold chain packaging to keep sensitive items cold in transit without external refrigeration
- Landscape soil to reduce watering

Smithers-Oasis phenolic foam is an expanded foam with controllable cell size. It's a lightweight foam available closed or open cell, different densities, size and shapes for different applications.

Foam Properties for Engineered Products:

<u>Engineered Products</u>	Applications	Compression (PSI)	Density (pcf)	Color
Phenolic Sculpture Foam	Cutting and Carving Molding and Milling	Between 10 – 17	Between 1.0 – 1.7	Salmon and Green
Sahara II Sculpture Foam	Cutting and Carving Arts and Crafts	Between 20 – 25	Between 1.0 – 1.7	Brown and Green
BIO Foam	Impressions Packaging Protector	Between 2.3 – 2.5	Between 0.9 – 1.0	Salmon and Blue
High Density Foam	Mold and Milling	Between 30 – 50	Between 3.0 – 6.0	Salmon
Absorbents Foam	Universal Absorbent Oil Only Absorbent Hazmat Absorbent	Between 10 – 17	Between 1.0 – 1.9	Salmon and Green
Floral Foam	Flower Arrangements	Between 10 – 17	Between 1.2 – 1.9	Green
Grower Foam	Seeds, Cuttings and Clone Propagation	Between 3 – 5	Between 0.9 – 1.3	Brown and Grey

Thermal Conductivity: Insulation	W/(m K) Btu/(ft h°F)	More than 0.02 – up to 0.025 More than 0.14 – up to 0.174
Energy	Kj/Kg BTU/Lbs	28,144.6 More than 10,000
Ash content when burned	%	5.04