

FOAM-IN-PLACE GASKETING

**Mono-Component, Robotically Applied,
Foam-In-Place PUR Material**

Saint-Gobain® Dynafoam® (member of the **Norseal®** product range) is a mono-component foam in place gasketing and cushioning material. It is foamed by mixing with Nitrogen (less than 5ppm humidity) and cures by reacting with moisture, creating low density thermoset, elastomeric, foamed gaskets.

This product range has been developed to seal out water, air or dust as well as decouple the noise vibrations. Thanks to its semi-closed cell structure, **Dynafoam** creates efficient water seal with only 30% compression. This cell structure generates soft and conformable gaskets avoiding thin walled plastic parts to distort when compressing the gasket. It shows a low water absorption and extremely tough skin, which prevent the gasket from being torn under rough assembly conditions.

Thanks to its engineered viscosity and its mechanical foaming, **Dynafoam** exhibits excellent thixotropic behavior allowing 3-dimensional and upside-down applications.

The desired gasket height can be achieved with or without a groove, allowing the maximum design flexibility for engineers.

Packaging

Dynafoam products are packed in a multilayer aluminum bag to prevent any leakage during transport and manipulation, as well as protecting the material from the humidity:

- **Dynafoam** 512 in drums of 185 kg
- **Dynafoam** 7440 range in drums of 180 kg



APPLICATIONS

- Automotive:
 - HVAC filter housing
 - Stop lights
 - Door modules and door locks
 - Timing belt covers
 - Plenum chambers
- Home appliances
- Electrical/Electronic components
- Audio speakers
- Construction elements

Dynafoam Range - Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Property	Test Method	Unit	512	7440	7440 Black	7440 FC	7440 S	
Density	ASTM D1056	kg/m ³	300 - 400	220 - 280	220 - 280	220 - 280	220 - 300	
Hardness	ASTM D2240	Shore OO	30 - 45	35 - 55	35 - 55	30 - 50	30 - 35	
Force to compress (30%)	ASTM D1667	N/cm	1.3 - 2.0	1.7 - 3.5	1.7 - 3.5	1.5 - 3.5	1.0 - 2.0	
Deflection force (30% after 1 minute)	ASTM D1667	N/cm	1.0 - 1.5	1.5 - 2.5	1.5 - 3.0	1.2 - 2.5	0.8 - 2.0	
Strength at break	DIN 53571	N/cm ²	20 - 35	> 20	> 20	> 20	> 10	
Elongation at break	DIN 53571	%	> 100	> 100	> 100	> 100	> 100	
Water absorption	ASTM D1056	%	< 15	< 10	< 10	< 10	< 10	
Compression set (25% - 70°C)	ASTM D1667	%	< 20	< 15	< 15	< 15	< 20	
Height : Width ratio	-	-	0.9	0.7	0.7	0.7	0.7	
Maximum height	-	mm	10	7	7	7	7	
Color*	-	-	Dark Grey	Grey	Black	Light Grey	Black	
Temperature range	-	°C	Continuous: -40 to 70 / Intermittent: +120					

*Colour may slightly vary from lot to lot, without affecting product performance.

Important Instructions

Because **Saint-Gobain** cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use. Our labs can support in prototyping.

Shelf Life

Dynafoam 7440 and 7440 Black have a shelf life of 12 months from date of production, under the following storage conditions: room temperature ≤ 25°C, under shelter (i.e. without direct exposure to sunshine & light).

Dynafoam 512, 7440 FC & 7440 S have a shelf life of 6 months from date of production, under the following storage conditions: room temperature ≤ 25°C, under shelter (i.e. without direct exposure to sunshine & light).

Dynafoam 512, 7440 FC & 7440 S have a shelf life of 12 months from date of production, under the following storage conditions: transported in refrigerated containers and refrigerated land transport, storage temperature of ≤ 15°C, under shelter (i.e. without any direct exposure to sunshine & light).

Before use it is recommended to condition the **Dynafoam** drum for at least 24 hours at room temperature, to optimize the viscosity for pumping.



IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain Performance Plastics assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

WARRANTY: For a period of 6 months, Saint-Gobain Performance Plastics warrants this product(s) to be free from defects in manufacturing. The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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