

#### Elastocool® F 2030 -

### The fast insulation solution for fridges and freezers

Elastocool® F 2030 is the new high-performance PU insulation foam from BASF for the refrigeration industry. This pentane-blown system offers maximum productivity combined with low material consumption and improved energy efficiency. This cutting-edge insulation technology has been developed using a completely re-engineered raw material set and facilitates a robust foaming process.



#### Fast demolding is the key word for high productivity

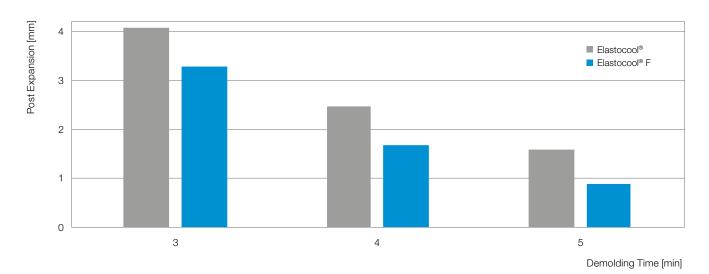
A polyurethane rigid foam is the solution of choice when it comes to insulation of refrigerators and freezers, as these materials offer the highest level of thermal insulating properties.

The demand for fast demolding has increased in importance in order to be able to save energy and to enhance productivity. The BASF R&D-Verbund consequently focused on this as one of the key features for the new generation of Elastocool®.

Elastocool® F 2030 boosts the capacity of foaming lines and adds flexibility to the production process. Additionally, the mechanical properties have been significantly improved, enabling a lower overall material consumption.

#### **Demolding Properties**

Post expansion - 90 mm Block-Mold (OP 17,5 %)



### Product properties and benefits at a glance

- Significantly reduced post expansion leads to faster demold cycles
- Capacity increase of existing foaming equipment without investment
- Improved energy efficiency derived from:
  - Improvement of thermal insulation properties
  - Potential increase of wall thickness without compromise in productivity
- Lower material consumption due to high structural stability
- Excellent surface quality
- Improved sustainability according to life cycle assessment

#### Performance comparison with competing materials

Value proposition	Technical property	Low	Rating	High
Processability	Flowability			
	Surface quality (voids)			
	Adhesion			
Energy efficiency	Thermal conductivity			
Material consumption	Compressive strength			
Production output	Demold time	— Elastocool® — Elastocool® F	=	

Specific results can deviate from general assessment

#### It is all about performance

# Overview how performance of Elastocool® F 2030 adds value in diverse departments

Procurement	Logistics	Development	Production	Quality assurance	Marketing and Sales
Lower density results into less material consumption per unit	Less material handling due to lower material density	More design freedom with regard to insulation thickness	Faster demolding (cycle times)  Reduced post expansion leads to improved quality and reduced scrap rate  Less post-treatment due to better surface quality	Better surface quality because of less voids and higher compression strength	Meeting customer demand for improved product quality due to lower post expansion and higher energy efficiency.
Material cost savings	Simplified logistics	Optimized design	Process cost cutting	Less customer claims	Improved product quality

# Elastocool® F 2030 – more than just a standard product You get...

- Customized polyurethane system formulations
- Technical service to translate requirements into solutions that work best for individual requests
- Drop-in solution new product is compatible to existing production equipment
- Technical training (processing know-how)



Flastocool® F 2030 **fast insulation** 

### Applications for Elastocool® F 2030

- Domestic fridges and freezers
- Commercial appliances
- Refrigerated display- and service cabinets
- Vending machines for chilled goods
- Cooler boxes

