



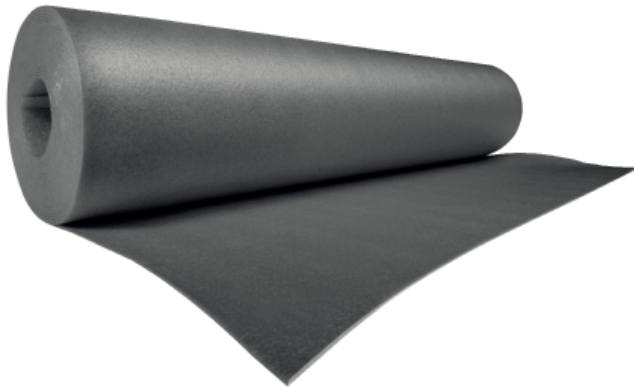
SABIC FOAM AND LIGHTWEIGHT SOLUTIONS

PORTFOLIO OVERVIEW

CHEMISTRY THAT MATTERS™

SABIC® LDPE FOAM SOLUTIONS

SABIC® LDPE (Low Density Polyethylene) is designed with characteristics that are determined by customers' requirements for the foaming extrusion process and their applications. A wide range of dedicated foamable LDPE products in the portfolio enables customers to address their main challenges with the best results.



GENERAL VALUE PROPOSITIONS OF SABIC® LDPE RESIN:

- Quality consistency
- Improved productivity
- Security of supply
- Less scrap and total cost saving

TYPICAL APPLICATIONS

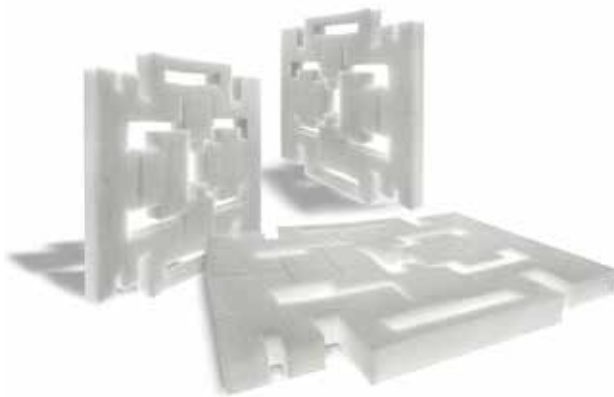
- Packaging
- Construction
- Automotive
- Footwear, Sports and Leisure

SABIC SOLUTIONS

- SABIC® LDPE
- SABIC® LDPE UMS (Ultra Melt Strength)

CHARACTERISTICS

- Good processability
- Dimensional stability
- Excellent foamability
- High purity
- High melt strength
- Good batch-to-batch consistency



SABIC® LDPE PRODUCT PORTFOLIO

GRADES	DENSITY	MFR	ANTIBLOCK & SLIP	FOAMING PROCESS
SABIC® LDPE UMS - ULTRA MELT STRENGTH				
1905U0	919	5.0	no	Extrusion
2202U0	922	1.9	no	Extrusion
SABIC® LDPE				
2004CX3	920	4.6	yes	Extrusion with crosslinking
2102X0	921	1.9	no	Batch ; Extrusion with and without crosslinking
2102X3	921	2.5	yes	Extrusion
2402CX0	924	2.0	no	Batch ; Extrusion with crosslinking
2601X1	926	0.65	yes	Extrusion
2602X1	926	1.5	yes	Extrusion
HP2024JDF	924	2.0	yes	Extrusion
HP2024NDF	924	2.0	no	Batch ; Extrusion with and without crosslinking
HP0824NDF	924	0.8	no	Batch ; Extrusion with and without crosslinking
HP2022NDF	922	2.0	no	Batch ; Extrusion with crosslinking

Typical property	Condition	Standard	Unit
Density		ISO 1183 (A)	kg/m³
MFR	190°C, 2.16kg	ISO 1133	dg/min

Typical values only. This document is made available for introductory purposes.
 For more product data we refer to the respective product data sheet (available online or upon request).

SABIC® POLYSTYRENE FOAM SOLUTIONS

SABIC® EPS (Expandable Polystyrene) and SABIC® PS are designed with characteristics that are determined by our customers' requirements for the foaming process and their applications. The SABIC® EPS foam product portfolio includes both flame retardant and standard grades with a wide bead size range from 0.4 - 0.25mm. The SABIC® PS foam product portfolio includes medium to low MFI PS that enable our customers to address their challenges with outstanding results.



GENERAL VALUE PROPOSITIONS OF SABIC® EPS AND SABIC® PS RESINS:

- Consistent quality
- Improved productivity
- Security of supply

TYPICAL APPLICATIONS

- Packaging
- Construction
- Consumer goods

SABIC SOLUTIONS

- SABIC® EPS
- SABIC® PS
- Excellent foamability

CHARACTERISTICS

- Good processability
- Good dimensional stability
- Excellent foamability



SABIC® POLYSTYRENE PRODUCT PORTFOLIO

GRADES	BEAD DIAMETER	DENSITY	APPLICATIONS
SABIC® EPS Standard Grades			
EPS 452	0.4 – 0.8	18 – 35	Fast cycle molding of articles with a wall thickness of less than 10 mm
EPS 552	0.6 – 1.1	17 – 30	Fast cycle shape molding for e.g. boxes and industrial packaging
EPS 652	0.9 – 1.4	16 – 25	Fast cycle, thick wall shape molding, medium/low density molding
EPS 763	1.2 – 2.5	15 – 20	Fast cycle low density block molding

SABIC® EPS Flame Retardant Grades			
EPS 450FF	0.4 – 0.8	18 – 35	Molding of thin-walled (5 – 10 mm) articles
EPS 550FF	0.6 – 1.1	16 – 30	Standard block molding
EPS 650FF	0.9 – 1.4	15 – 25	Medium and low density block molding Thick wall contour shape molding
EPS 760FF	1.2 – 2.5	15 – 20	Fast cycle low density block molding

GRADES	MFR	VICAT	HDT	APPLICATIONS
SABIC® PS GENERAL PURPOSE GRADES				
PS 155	7	102	100	Medium flow GPPS grade for foam extrusion, e.g. insulation boards.
PS 160	3.3	104	100	High molecular weight GPPS grade for foam extrusion, e.g. insulation boards and food packaging

Typical property	Condition	Standard	Unit
Density	One pass pre-expansion		kg/m ³
Bead diameter		SABIC-020	mm
MFR	200°C, 5kg	D-1238	dg/min
Vicat		D-1525	°C
HDT		D-648	°C

Typical values only. This document is made available for introductory purposes.
For more product data we refer to the respective product data sheet (available online or upon request).

SABIC® PP-UMS FOAM SOLUTION

Close collaboration with our partners in the value chain has enabled SABIC to build up a large bank of knowledge on foaming technologies, and to develop a dedicated, diverse global foam portfolio, applicable in almost all industrial applications. SABIC is adding to this portfolio with SABIC® PP-UMS (Ultra Melt Strength) resin-a completely new generation of high melt strength foamable polypropylenes.

SABIC® PP-UMS HAS A MELT STRENGTH >65 cN, ENABLING AN UNPRECEDENTED LEVEL OF LIGHTWEIGHTING



TYPICAL APPLICATIONS

- Automotive
- Packaging
- Consumer goods

GENERAL VALUE PROPOSITIONS OF SABIC® PP-UMS:

- Pure and clean – designed for meeting stringent industry requirements
Lowest VOC-FOG values
- Thermal and mechanical properties – offers a wide range of foam properties
eg. improved compression strength
- Efficient processing – leading to superior foamability
Lower densities possible
- Unprecedented lightweighting – enabling design and cost optimization
High melt strength allows blending with different blend partners

SABIC® PP-UMS PORTFOLIO

GRADES	DENSITY	MFR	MELT STRENGTH	ANTIBLOCK AND SLIP	FOAMING PROCESS
SABIC® PP-UMS					
561P	905	2.5	≥ 65 cN	no	Extrusion
Typical property	Condition	Standard	Unit		
Density		ISO 1183 (A)	kg/m ³		
MFR	230°C, 2.16kg	ISO 1133	dg/min		

Typical values only. This document is made available for introductory purposes.
For more product data we refer to the respective product data sheet (available online or upon request).

FORTIFY™ AND COHERE™ BUILDING BLOCKS FOAM SOLUTIONS

FORTIFY™ & COHERE™ combine the properties of thermoplastics and elastomers. These grades are designed as low density, high performance modifiers to provide superior flexibility, resilience and compression set properties for multiple foam applications. They can be typically used for all types of foam, produced with chemical blowing agents or physical gases, cross-linked and non cross-linked.



TYPICAL APPLICATIONS

- Footwear
- Sports & Leisure
- Automotive
- Packaging
- Building & Construction

FORTIFY™ and COHERE™ PRODUCT PORTFOLIO

GRADES	DENSITY	MFR	ANTIBLOCK AND SLIP	FOAMING PROCESS
FORTIFY™				
C1055D	857	1.0	no	Batch; Injection; Extrusion – cross linked and non-cross linked
C05075DF	868	0.5	no	Batch; Injection; Extrusion – cross linked and non-cross linked
C11075DF	868	1.0	no	Batch; Injection; Extrusion – cross linked and non-cross linked
C1085	885	1.0	no	Batch; Injection; Extrusion – cross linked and non-cross linked
C5070D	868	5.0	no	Batch; Injection; Extrusion – cross linked and non-cross linked
COHERE™				
8102	902	1.0	no	Batch; Injection; Extrusion – cross linked and non-cross linked
8402	902	3.5	no	Batch; Injection; Extrusion – cross linked and non-cross linked
Typical property	Condition	Standard	Unit	
Density		ISO 1183 (A)	kg/m ³	
MFR	190°C, 2.16kg	ISO 1133	dg/min	

Typical values only. This document is made available for introductory purposes.
For more product data we refer to the respective product data sheet (available online or upon request).

CONTACT US

SABIC HEADQUARTERS

PO Box 5101, Riyadh 11422
Saudi Arabia
T +966 (011) 225 8000
F +966 (011) 225 9000
E info@sabic.com

EUROPE

PO Box 5151
6130 PD Sittard,
The Netherlands
T +31 467 222 222
F +31 467 220 000
E info@sabic-europe.com

AMERICAS

2500 City West Boulevard
Houston, TX 77042 USA
T +1 713-430-2301

GREATER CHINA

SABIC (Shanghai) Trading Co. Ltd.

2550, Xiupu Road Pudong
Shanghai 201319
China
T +86 21 2037 8188
F +86 21 2037 8288
E stcl-sh@sabic.com

REST OF ASIA

SABIC Singapore Office

2550, Xiupu Road Pudong
Shanghai 201319
China
T +86 21 2037 8188
F +86 21 2037 8288
E stcl-sh@sabic.com

INDIA

10th Floor, Ambience Corporate Towers II
Ambience Island,
Gurgaon 122001
Delhi, India
T +91 124 4746191
M +91 9599116053

JAPAN

Tokyo Club Building, 7F
Kasumigaseki 3-2-6, Chiyoda-ku
Tokyo 100-0013, Japan
T +81 3 3593 4700
F +81 3 3593 4707
E sjl@sabic.co.jp

KOREA

20th floor, Donghoon Tower
702-19, Yeoksam-dong
Kangnam-ku
Seoul 135-513, South Korea
T +82 2 510 6000
F +82 2 510 6666
E skl@sabic.co.kr

INDONESIA

Indonesia Stock Exchange Building
Suite 1702, Tower 1, Level 17
Jalan Jend
Sudirman Kav. NO. 52-53
Jakarta 12190, Indonesia
T +62 215 140 0055
F +62 215 140 0077
E sappl-iro@sabic.co.id

MALAYSIA

Suite 3B-11-3, Level 11
Block 3B, Plaza Sentral
Jalan Stesen Sentral 5
KL Sentral, 50470
Kuala Lumpur, Malaysia
T +60 322 746 198
F +60 322 733 487
E sappl@sabic.com

PHILIPPINES

T +63 917 529 8791
E sappl@sabic.com

THAILAND

36th Floor CRC Tower, All Season Place
87/2 Wireless Road, Lumpini
Rhathumwan, Bangkok 10330, Thailand
T +66 62 414 6955
E sappl@sabic.com

VIETNAM

Unit 3, Level 40
Bitexco Financial Tower,
02 Hai Trieu Street
Ben Nghe Ward, District 1
Ho Chi Minh City, Vietnam
T +84 839 141 010
F +84 839 142 088
E sappl-vro@sabic.com.vn

AUSTRALIA AND NEW ZEALAND

T +61 417 852 914
E sappl@sabic.com

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right. SABIC and brands marked with™ are trademarks of SABIC or its subsidiaries or affiliates.

© 2021 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

† Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.