



KELTAN® 5470Q

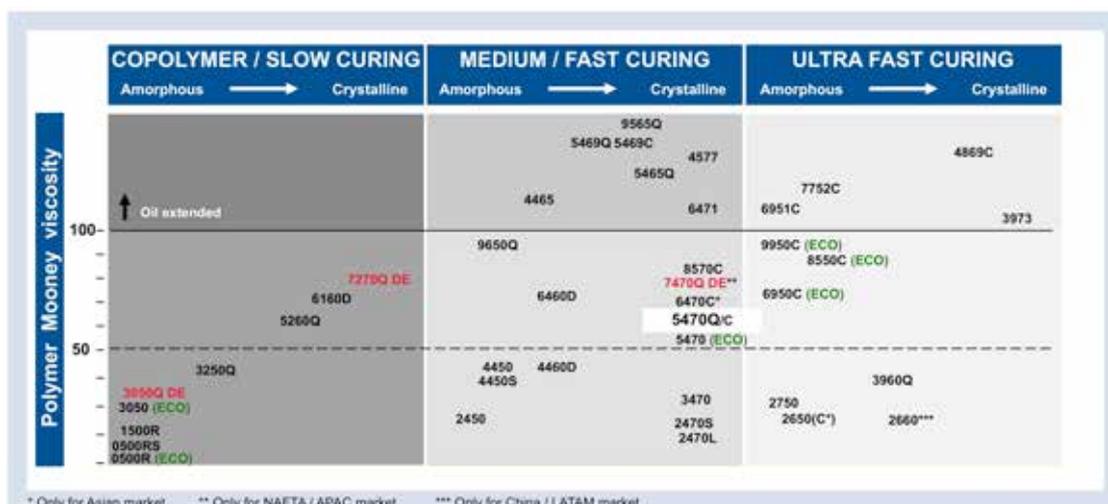
Keltan® 5470Q is a crystalline ethylene-propylene rubber with medium ENB (ethylidene norbornene) content and a medium Mooney viscosity. The combination of a highly crystalline structure with a narrow molecular weight distribution and medium

viscosity provides a robust polymer with good processing characteristics. Due to the high crystallinity of the grade, very high mechanical strength can be achieved.

Property*	Typical Values	Units	Test Method
Mooney viscosity, ML (1+4) 125°C	57	MU	ASTM D1646
Ethylene content	68.0	wt. %	ASTM D3900A
ENB content	4.7	wt. %	ASTM D6047

Product Portfolio

The product overview below shows the position of **Keltan® 5470Q** in relation to the other products in the Keltan® EPDM product portfolio.



* Only for Asian market ** Only for NAFTA / APAC market *** Only for China / LATAM market

Production

Keltan® 5470Q is produced in Orange, Texas, USA, using suspension polymerization and Ziegler Natta catalysis.

Quality Improvement

ARLANXEO is continuously improving the quality of its plants and has recently invested significantly at the site in Orange, TX to upgrade and improve the plant, and the quality of its products. ARLANXEO intends to implement process improvements for Keltan® 5470Q in the Orange plant, and to enhance the product quality of the entire Orange product portfolio. As an example, we are currently implementing an improved catalyst activation technology at Orange, bringing its manufacturing operation in line with the technology already used at all of our other Keltan® EPDM production sites. The core Ziegler Natta catalyst system is not changed and remains intact. Most importantly, the product has the identical processing and compounding properties that it has always had.

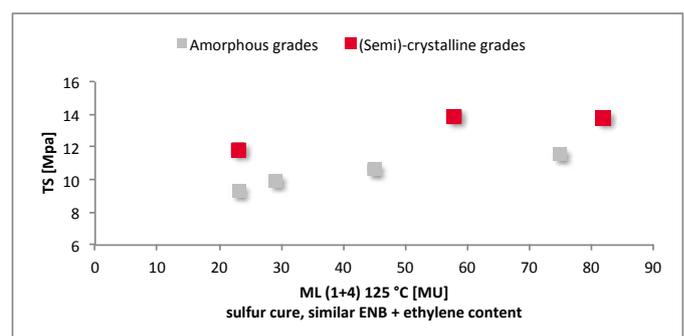
In the case of Keltan® 5470Q, the improvement in catalyst activation means:

- The catalyst residues are lower than in the past, resulting in better baseline color and color stability.
- The smell of the product has changed slightly. The new smell is very similar to that of Keltan® products from other production sites, which means a milder and sweeter odor than current Orange products.
- No change at all in performance characteristics or specifications.

Unique Polymer Characteristics

Keltan® 5470Q provides significant benefits when compounding and in end-use applications. These include:

- Excellent processing. The friable bale breaks down easily, optimizing mixing performance.
- Excellent capacity for high filler and oil loading levels, thus helping to optimize compound costs.
- Excellent physical properties because of the high ethylene content and narrow molecular weight distribution. The narrow molecular weight distribution ensures a good balance between tensile and tear properties.
- Excellent blending partner for amorphous EPDM grades, allowing a compounder to improve green strength, increase extrusion output, improve extrudate surface properties and achieve better modulus and tensile properties.



Application

- Keltan® EPDM products are globally the choice of automotive component designers and are being used in numerous automotive applications. Keltan® 5470Q is being used in automotive applications such as hoses and solid seal systems.
- Keltan® 5470Q is able to meet the processing and physical properties of (molded) rubber goods in industrial applications like belts and in TPV.

Keltan® 5470Q is used in low voltage cables and as cable fill mass.

In all of these applications, Keltan® 5470Q provides flexibility, heat resistance, and good protection against moisture and weather effects.

Typical Compound Formulation

Automotive, Black Solid Seal, Medium Hardness (50-75 Shore A), Ultra High Frequency / Hot Air (UHF/HA), Sulphur Cured

Ingredient	PHR		
Keltan® 5470Q	100	CBS-80	2,1
ZnO-active	5	ZDBC-80	2,5
Stearic acid	1	ZDMC-80	1,2
Carbon black N-550	120	ETU-80	1,0
Paraffinic oil	80	S-80	1,8
Whiting	85	Total	410,1
TEA	0,5		
CaO-80	10		

Mechanical Properties*	Unit	Typical Value
Hardness	[ShA]	72
Tensile strength	[MPa]	11,4
Modulus 100%	[MPa]	3,5
Modulus 300%	[MPa]	9,2
Elongation at break	[%]	409
Compression set (24h/70°C)	[%]	26

*These items are provided as general information only. They are approximate values and are not considered part of the product specifications.

More Keltan® 5470Q based pilot formulations will be published at our customer information platform, Keltan® Connect (<https://access.keltan.com>).

Product Information

- **Product Storage:** Information regarding the storage of Keltan® EP(D)M can be found in the 'Keltan® EP(D)M Handling & Storage Guidelines' at Keltan® Connect.
- **Product Safety:** Detailed product safety data can be found in the 'Keltan® EP(D)M Material Safety Data Sheet' at Keltan® Connect.
- **FDA and BfR Declarations:** can be requested at Keltan® Connect.
- **Keltan® Connect:** The electronic customer information platform for all Keltan® product information. Please contact your local representative for access to Keltan® Connect. (<http://connect.keltan.com>).

Keltan Elastomers - The Only True Global EPDM Supplier

Details



● BL Keltan: Production site ● Regional sales offices and technical services

- EPDM plants in all strategic regions
- Regional Service:
 - 25 sales offices
 - Technical services
 - Application development
- Expansion in China
 - Largest world scale plant
 - Wholly owned by ARLANXEO

Contact

■ EMEA

E-mail: john.beelen@arlanxeo.com
Phone: +31 46 7020 871

■ CHINA

E-mail: baojia.cheng@arlanxeo.com
Phone: +86 21 6109 8216

■ APAC

E-mail: wengfook.chee@arlanxeo.com
Phone: +65 6725 5778

■ NAFTA

E-mail: pete.spanos@arlanxeo.com
Phone: +1 440 678 8768

■ LATAM

E-mail : leandro.alves@arlanxeo.com
Phone : + 55 11 3741 7928

■ Internet

www.keltan.com

We are happy to support your business. Please contact us for additional information: visit www.Keltan.com

ARLANXEO

Performance Elastomers

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

This document was issued on September 23rd, 2016 and replaces earlier versions. Keltan® is a registered trademark of ARLANXEO Netherlands B.V.