



KELTAN® 7470Q

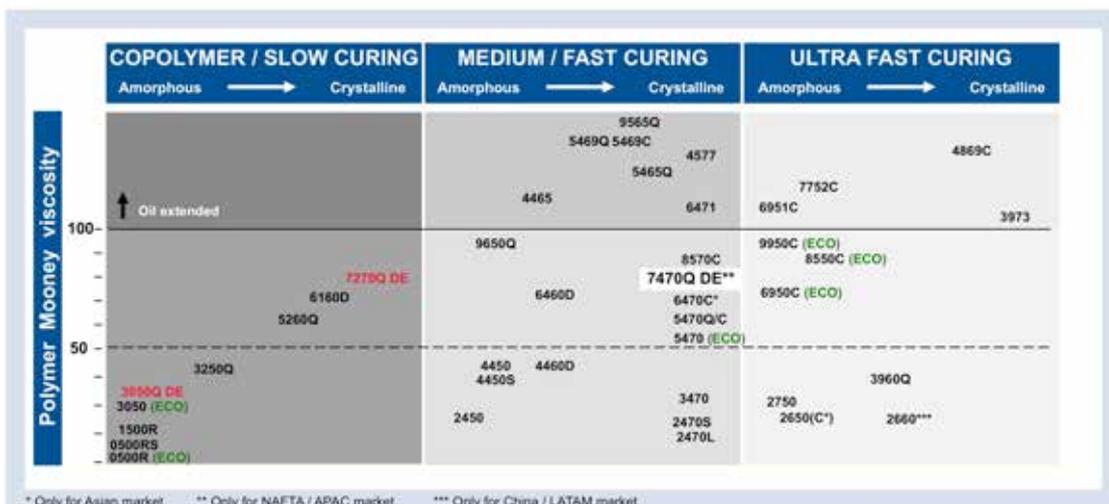
Keltan® 7470Q DE is a crystalline ethylene-propylene rubber with medium ENB (ethylidene norbornene) content and a medium-high Mooney viscosity. The combination of a highly crystalline structure with a narrow molecular weight distribution and medi-

um-high 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	70	MU	ASTM D1646
Ethylene content	67.0	wt. %	ASTM D3900A
ENB content	4.7	wt. %	ASTM D6047

Product Portfolio

The product overview shows the position of Keltan® 7470Q DE in the Keltan® EPDM product portfolio.



Production

Keltan® 7470Q DE is a developmental grade and 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. These improvements not only made it possible to develop new grades, like Keltan® 7470Q DE, but have also enhanced 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.

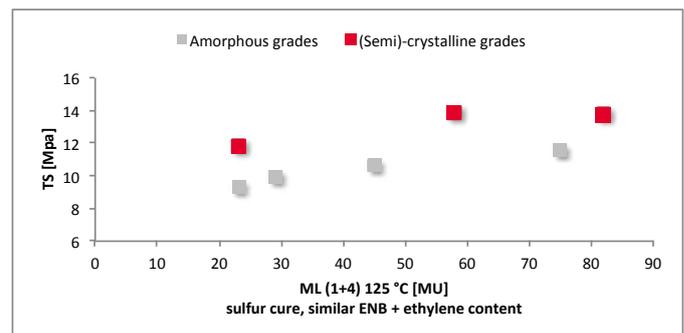
In the case of Keltan® 7470Q DE, the improvement in catalyst activation means:

- The catalyst residues are low, resulting in better baseline color and color stability.
- The smell of this new product is very similar to that of Keltan® products from other production sites, which means a milder and sweeter odor than current Orange products.

Unique Polymer Characteristics

Keltan® 7470Q DE provides significant benefits when compounding and in end-use applications. These include:

- Excellent processing. The friable bale breaks down easily which optimizes mixing performance.
- Excellent capacity for higher filler and oil loading levels, helping to optimize compound costs.
- Excellent physical properties because of the high ethylene content and optimal molecular weight. 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.
- Keltan® 7470Q DE combines excellent tensile and set properties!



Application

- Keltan® EPDM products are globally the choice of automotive component designers and are being used in numerous automotive applications. Therefore, Keltan® grades can be found in almost all cars currently produced.
 - Keltan® 7470Q DE is being targeted for automotive applications like hoses and seals.
- In all of these applications, Keltan® 7470Q DE provides improved strength, flexibility, heat resistance, durability and good protection against moisture and weather effects.

Typical Compound Formulation

Automotive, Black Hose, Medium Hardness (50-75 Shore A), Sulphur Cured

Ingredient	PHR		
Keltan® 7470Q DE	60	Sulphur	0,35
Keltan® 2450	40	DPTT-70	1
ZnO-active	4	TMTD-70	2
Stearic acid	1,5	ZDBC-80	2
Carbon black N-650	90	Total	319,35
Paraffinic oil	52		
Omya BSH	65		
Aktioplast T	1,5		

Mechanical Properties*	Unit	Typical Value
Hardness (Micro)	[IRHD]	63
Tensile strength	[MPa]	11,5
Modulus 100%	[MPa]	1,9
Modulus 300%	[MPa]	5,3
Elongation at break	[%]	661
Compression set (24h/70°C)	[%]	24

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

More Keltan® 7470Q DE 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

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

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Performance Elastomers

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