

Go bio-based with Keltan® Eco

Benefits of Keltan® Eco include:

- Bio-based content up to 70%, which can be validated by ASTM D6866 Carbon-14 test
- Uncompromised quality
- Reduced dependence on fossil resources
- Reduced carbon footprint

ARLANXEOs' Keltan® Elastomers business is pleased to have six new grades in the Keltan® Eco portfolio. With exactly the same specifications as their conventional coun-

terparts, the Keltan® Eco products are "drop-in" equivalents with one important difference: up to 70% of the content is bio-based! Thus, they offer an environmentally friendly alternative for any type of EPDM application.

Keltan® Eco grades include:

Keltan® Eco 3050 Keltan® Eco 8550
 Keltan® Eco 5470 Keltan® Eco 9950
 Keltan® Eco 6950 Keltan® Eco 0500R

Global Keltan® nomenclature

**Mooney viscosity
ML(1+4) 125°C**
5 = 50 - 59

**ENB content
weight %**
4 = 4.0 - 4.9

Suffix

C = ACE™ grade

Q = Slurry grade

D = DCPD grade

L = Low Mooney

P = Pellets

S = Special

DE = Development

Keltan® 5470 C

Crystallinity:
5 = amorphous
6 = semi crystalline
7 = crystalline

**Oil content parts
hundred rubber**
0 = 0 - 10

Keltan® reactive extrusion (REX) nomenclature

**Mooney viscosity
ML(1+4) 125°C**
0 = 0 - 10 MU

Crystallinity

5 = amorphous

6 = semi crystalline

7 = crystalline

Keltan® 0500 R

**Grafting level*
weight %**
00 = 0 wt. %

Suffix

R = Reactive Extrusion

* Grafting of the EP(D)M polymer with Maleic Anhydride is possible. The grafting level in weight % is indicated by the last two digits.

Trial product:

(DE = Development product = trial product). The information contained herein is merely preliminary. Testing as to properties and applications is not final. Further information, including data which could change or add hazards with use, may be developed by the manufacturer, the user or a third-party institute. Such information may be needed to properly evaluate or use this product. Use is undertaken at the sole risk of the user.

Quality & Environmental Management:

Keltan® is produced under strict control regarding safety, environmental protection and quality. The whole supply chain, from production to customer service, is covered by ISO 9001 and ISO 14001 certification.

Product Safety:

Relevant safety data and references as well as the possibly necessary warning labels are to be found in the corresponding safety data sheets.

Health and Safety Information:

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the ARLANXEO products mentioned in this publication. For materials mentioned which are not ARLANXEO products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult us through your ARLANXEO representative or the Health, Safety, Environment and Quality Department (HSEQ) of ARLANXEO.

Regulatory Compliance Information:

Some of the end uses of the products described in this publication must comply with applicable regulations, such as the FDA, BfR, NSF, USDA and CPSC. If you have any questions on the regulatory status of these products, contact your ARLANXEO representative.

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, which can be found at the ARLANXEO homepage. 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.

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KELTAN® EP(D)M AT A GLANCE

Keltan® Eco is the world's first commercial EPDM produced from bio-based feedstock. The ethylene used in this process is derived from ethanol produced from sugarcane.

www.arlanxeo.com

Keltan® Grades Portfolio EMEA

	Viscosity		Monomer content			Other properties		
	Test conditions	Setpoint	Etylene content wt. %	Third Monomer		Oil content phr	Type	Polymer Structure
		MU g/10 min.		type –	content wt. %			
Keltan® 2450	ML(1+4) 125 °C	28	48	ENB	4,1			CLCB
Keltan® 2470L	ML(1+4) 125 °C	22	69	ENB	4,2			CLCB
Keltan® 2470S	ML(1+4) 125 °C	25	69	ENB	4,2			CLCB
Keltan® 2650	ML(1+4) 125 °C	25	53	ENB	6,0			CLCB
Keltan® 2750	ML(1+4) 125 °C	28	48	ENB	7,8			CLCB
Keltan® 3050	ML(1+4) 100 °C	51	49	-	0,0			N
Keltan® 3250Q	ML(1+4) 125 °C	33	55	ENB	2,3			N
Keltan® 3470	ML(1+4) 125 °C	36	68	ENB	4,6			CLCB
Keltan® 3960Q	ML(1+8) 100 °C	54	56	ENB	11,0			N
Keltan® 3973	ML(1+4) 125 °C	34	66	ENB	9,0	30	Clear	CLCB
Keltan® 4450	ML(1+4) 125 °C	46	52	ENB	4,3			N
Keltan® 4450S	ML(1+4) 125 °C	42	52	ENB	4,3			CLCB
Keltan® 4460D	ML(1+4) 125 °C	46	58	DCPD	4,5			B
Keltan® 4465	ML(1+4) 125 °C	48	56	ENB	4,1	50	Clear	B
Keltan® 4577	ML(1+4) 125 °C	46	66	ENB	5,1	75	Clear	N
Keltan® 4869C	ML(1+4) 125 °C	48	62	ENB	8,7	100	Clear	CLCB
Keltan® 5260Q	ML(1+4) 125 °C	55	62	ENB	2,3			N
Keltan® 5465Q	ML(1+8) 150 °C	37	64	ENB	4,0	50	Clear	N
Keltan® 5469C	ML(1+4) 125 °C	52	58	ENB	4,5	100	Clear	CLCB
Keltan® 5469Q	ML(1+8) 150 °C	38	59	ENB	4,0	100	Clear	N
Keltan® 5470C	ML(1+4) 125 °C	55	66	ENB	4,6			CLCB
Keltan® 5470Q	ML(1+4) 125 °C	57	67	ENB	4,7			N
Keltan® 6160D	ML(1+4) 125 °C	63	64	DCPD	1,2			M
Keltan® 6460D	ML(1+4) 125 °C	63	58	DCPD	4,5			VB
Keltan® 6471	ML(1+4) 125 °C	65	67	ENB	4,7	15	Clear	N
Keltan® 6950C	ML(1+4) 125 °C	65	44	ENB	9,0			CLCB
Keltan® 6951C	ML(1+4) 125 °C	63	44	ENB	9,0	15	Clear	CLCB
Keltan® 7270Q	ML(1+4) 125 °C	72	67	ENB	2,8			N
Keltan® 7752C	ML(1+8) 150 °C	53	45	ENB	7,5	20	Clear	CLCB
Keltan® 8550C	ML(1+4) 125 °C	80	48	ENB	5,5			CLCB
Keltan® 8570C	ML(1+4) 125 °C	80	66	ENB	5,0			CLCB
Keltan® 9565Q	ML(1+8) 150 °C	67	62	ENB	5,5	50	Clear	N
Keltan® 9650Q	ML(1+8) 150 °C	60	54	ENB	6,5			N
Keltan® 9950C	ML(1+8) 150 °C	60	44	ENB	9,0			CLCB
Keltan® 0500R	190°C / 2.16 kg	11	49	-	0,0			N
Keltan® 0500RS	190°C / 2.16 kg	6,5	49	-	0,0			N
Keltan® 1500R	190°C / 2.16 kg	2,55	49	-	0,0			N

CLCB = Controlled Long Chain Branching
N = Narrow molecular weight distribution
M = Medium molecular weight distribution

B = Broad molecular weight distribution
VB = Very broad molecular weight distribution

Type	Packaging							
	Wrapping foil			Bale		Box		
	Color	Thickness microns	Weight kg	Form	Number bales	Weight kg	Supported	Material
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Quasi friable bale	40	1000	No	Wood & cardboard
EVA	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
EVA	transparent	70	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Quasi friable bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	34	Heavy bale	30	1020	No	Cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Friable bale	30	750	Yes	Cardboard
LDPE	transparent	50	25	Friable bale	30	750	Yes	Cardboard
LDPE	transparent	50	25	Standard bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Quasi friable bale	40	1000	No	Wood & cardboard
LDPE	transparent	50	25	Quasi friable bale	40	1000	No	Wood & cardboard
EVA	transparent	50	25	Standard bale	30	750	Yes	Cardboard
EVA	transparent	50	25	Standard bale	30	750	Yes	Cardboard
LDPE	transparent	50	25	Standard bale	30	750	No	Cardboard
EVA	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Quasi friable bale	36	900	No	Cardboard
LDPE	transparent	50	25	Quasi friable bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
LDPE	transparent	50	25	Standard bale	36	900	No	Cardboard
EVA	transparent	50	25	Standard bale	30	750	Yes	Cardboard
-	-	-	22,7	Standard bale	30	681	Yes	Cardboard
-	-	-	22,7	Standard bale	30	681	Yes	Cardboard
-	-	-	22,7	Standard bale	30	681	Yes	Cardboard

ENB = Ethylidene norbornene
DCPD = Dicyclopentadiene

The **Keltan®** portfolio consists of a broad range of global grades with a diversity of properties that offer freedom in recipe formulations, product design and processing windows. This, in turn, allows our customers to optimize between product performance and cost efficiency.



■ Keltan® offers a broad range of products for interior as well as exterior automotive applications.

Your direct contact for further information

Please direct any questions on **Keltan® EP(D)M** to one of the following addresses, contact your regional sales office or visit our technical online system: www.keltan.com

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