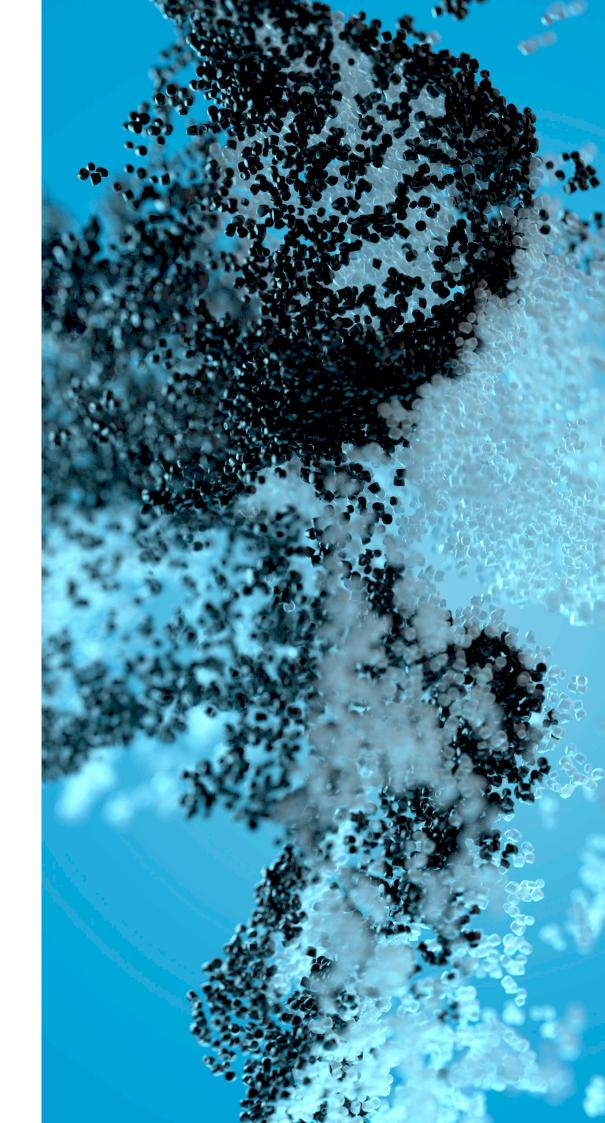
Qenos | Ingenious Transformations

POLYETHYLENE AT A GLANCE



Qenos





Alkadyne® PE100 Pipe Extrusion Grades

Grade	Melt Index* (g/10 min@190°C, 5.00kg)	Density [#] (g/cm³)	Applications					
HDF193B	0.3	0.961	High Density black PE100 type resin certified to AS/NZS 4131, for use in pressure pipes and fittings. Excellent low sag properties and throughput, suitable for the majority of PE100 pipe dimensions.					
HDF145B	0.2	0.961	High Density black PE100 type resin certified to AS/NZS 4131, for use in pressure pipes and fittings. Exceptional low sag properties and throughput, suitable for the most challenging pipe dimensions.					
HDF193N	0.3	0.952	High Density natural resin for extrusion into a full range of non standard pipe products and as a base for PE100 type striping and jacket compounds.					
HCR193B1	0.2	0.959	High Density black PE100 type resin with high stress crack resistance (HSCR) certified to AS/NZS 4131 and in accordance with PIPA guideline POP016, for use in pressure pipes and fittings. Designed for trenchless installations and high abuse environments.					

Notes: 1. PE100 HSCR striping compounds available upon request in blue, yellow, cream and purple.

Alkadyne® PE Pipe Extrusion Grades										
Grade	Melt Index* (g/10 min@190°C, 5.00kg)	Density# (g/cm³)	Applications							
MDF169	1.0	0.943	Medium Density natural high molecular weight resin for extrusion into a full range of non standard pipe products.							

Alkatan	Alkatane [®] HDPE Tape and Monofilament Grades										
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications								
GF7740F2	0.4	0.950	Extrusion applications including stretched tape, monofilament, tarpaulins, and blown film.								

Alkatuf	Alkatuff [®] LLDPE Rotational Moulding Grades											
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications									
LL711UV	3	0.938	Applications requiring excellent ESCR, chemical resistance ¹ , stiffness, toughness and UV protection, such as water and chemical tanks, septic systems and kayaks.									
LL705UV	5	0.935	Applications requiring high ESCR, chemical resistance ¹ , toughness, stiffness and high level UV stabiliser, such as leisure craft, playground equipment and agricultural tanks.									
LL755	5	0.935	Applications requiring high ESCR, chemical resistance ¹ , toughness and stiffness. Incorporation of suitable UV stabilisation is required for outdoor applications.									
LL710UV	10	0.930	High speed intricate applications requiring good ESCR, chemical resistance ¹ , toughness and UV protection, such as consumer goods and playground equipment.									

Notes: 1. The level of chemical resistance is a function of product design and environmental conditions. Contact Qenos for further information.

Alkathe	ne® LDPE Filr	n Grade	s	Addi	itives			Applications					
Grade	Melt Index [*] (g/10 min@190°C, 2.16kg) (g/cm ³)		g/10 min@190°C, (g/cm ³)		Slip ²	Heavy Duty Bags	Shrink	Produce	Carry Bags	Bread	Cling Wrap	Freezer Film	Overwrap
XDS34	0.30	0.922	Heavy duty sacks, pallet wrap and industrial applications requiring heavy gauge film. Additive free.			~	~						
LDF433	0.45	0.925	Heavy duty sacks, pallet wrap and industrial applications requiring medium to heavy gauge film with increased stiffness.	~		~	~						
LDD201	0.45	0.922	General purpose medium to heavy gauge film for heavy duty bags and shrink film and for use as a blend component.			~	~						
LDD203	0.45	0.922	General purpose medium to heavy gauge film for heavy duty bags and shrink film requiring antiblock, and for use as a blend component.	~		~	~						
LDD204	0.45	0.922	General purpose medium to heavy gauge film for heavy duty bags and shrink film where a medium level of slip is required.	~	М	~	~						
LDD205	0.45	0.922	General purpose medium to heavy gauge film for heavy duty bags, frozen food and produce bags where a high level of slip is required or for use as a blend component.	~	Н	~	~	~				~	
LDH210	1.0	0.922	Bundle shrink and other medium gauge film applications such as produce bags, carry bags and for blending into other film grades.				~	~	~				
LDH215	1.0	0.922	General purpose medium gauge film for produce bags and carry bags, frozen food where a high level of slip is required or for use as a blend component.	~	Н			~	~				
XJF143	2.5	0.920	Additive free, general purpose low gauge film for overwrap and other applications and for use as a blend component.										\checkmark
LDJ226	2.5	0.922	Bundle shrink, low gauge shrink film and general purpose applications where a medium level of slip and antistatic are required.	~	M ¹		~		~				~
LD0220MS	2.5	0.922	High quality low gauge film for lamination and overwrap applications where a medium level of slip is required.	~	М								~
LDJ225	2.5	0.922	High quality, low gauge film primarily intended for bread bags and overwrap but also general purpose applications where a very high level of slip is required.	~	VH					~			~
XLF197	5.5	0.920	High quality, very thin gauge and high clarity film primarily intended for food and packaging wrap and for dry-cleaning film. Additive free.								~		

Notes: 1. Based on antistatic additive 2. VH = Very High Slip, H = High Slip, M = Medium Slip

Alkatu	lkatuff [®] LLDPE Film Grades								Applications							
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications	Antiblock	Slip ¹	Processing Aid	Heavy Duty Bags	Stretch	Agricultural Film	General Purpose	Garbage Bags	Lamination	FFS	Freezer Film	Overwrap	Bubble wrap
LL438	0.8	0.922	Heavy duty sacks, agricultural films, lamination and form, fill and seal packaging where enhanced toughness and sealing characteristics are desired.			~	~		~	~		~	~	~		
LL501	1.0	0.925	General purpose industrial, agricultural and heavy duty films and as a blend component to improve film handling in converting and packaging operations.				~			~						
LL601	1.0	0.925	General purpose industrial, agricultural and heavy duty films and as a blend component to improve film handling in converting and packaging operations.	~	Н					~	~				~	
LL425	2.5	0.918	High quality cast film for applications that require toughness, high clarity and processability.					~								~
LL525	2.5	0.935	General purpose cast film applications requiring high tensile strength and stiffness, such as bubble wrap and personal care products.							~						√

Notes: 1. VH = Very High Slip, H = High Slip, M = Medium Slip

Alkama	x [®] mLLDPE Fi	lm Grad	es	Additives Ap						Арр	Applications								
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications	Antiblock	Slip ¹	Processing aid	Heavy Duty Bags	Stretch	Produce	Carry Bags	Bread	Agricultural Film	General Purpose	lce Bags	Lamination	FFS	Freezer Film	Overwrap	Liners
ML1810PN	1.0	0.918	Heavy duty bags, industrial and agricultural films, and form, fill and seal applications and ice bags where outstanding toughness, sealing and hot tack properties are desirable or for downgauging of existing film structures.			V	V		~	~	~	~	~	~	~	~	~	~	~
ML1810PS	1.0	0.918	Heavy duty bags, industrial and form, fill and seal applications and ice bags where outstanding toughness, sealing, hot tack properties and high slip are desirable or for downgauging of existing film structures.	~	Н	V	~		~	~	~		~	~	~	~	~	~	~
ML2610PN	1.0	0.926	Heavy duty bags, lamination, industrial and form, fill and seal applications where outstanding stiffness, toughness, optical and sealing properties are desirable or for downgauging of existing film structures.			V	~		~	~	~		~		~	~	√		~
ML1710SC	1.0	0.917	Stretch cling films (with addition of appropriate cling additive) and other film applications where outstanding toughness, optical and sealing properties are desirable or for downgauging of existing film structures.			~		~				~							

Notes: 1. VH = Very High Slip, H = High Slip, M = Medium Slip

Alkatane [®] HDPE Film Grades Applica										
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density# (g/cm³)	Applications	Carry Bags	General Purpose	Liners	Barrier Film			
GM4755F	0.10	0.955	Carry bags and liners where high impact, toughness and stiffness are desirable and as a blend component into LDPE and LLDPE films for heavy duty applications.	~	~	~				
HDF995	0.9	0.965	Moisture barrier and blend component into LDPE and LLDPE films to enhance stiffness. Blend component in core layer for high clarity coextruded films.		~		~			

Alkatan	Alkatane [®] HDPE Blow Moulding Grades												
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications										
HD0840	0.06	0.953	Large part blow mouldings, especially blow moulded self-supported drums and tanks (25 – 220 litres). Exceptional ESCR.										
HD1155	0.07	0.953	Large part blow mouldings, including 25 litre to 220 litre tanks and drums. Exceptional ESCR.										
GM7655	0.09	0.954	Blow moulded containers including household and industrial chemical (HIC). Suitable for larger part mouldings. Exceptional ESCR.										
GF7660	0.30	0.959	Household and industrial chemical (HIC) containers, including detergent and pharmaceutical bottles. Excellent ESCR.										
GE4760	0.60	0.964	Blow moulded water, dairy and fruit juice bottles.										
HD6400	0.70	0.965	High speed dairy packaging applications and other thin walled bottles such as milk, cream, fruit juice and cordial.										

Alkathene[®] LDPE Extrusion Coating Grades

Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density# (g/cm³)	Applications						
XLC177	4.5	0.922	Applications including milkboard and fabric extrusion coating where very good drawdown, low moisture vapour transmission rates and excellent hot tack are desirable. Additive free.						
WNC199	8.0	0.918	Liquids packaging and other sensitive food packaging laminates where excellent heat seal, low extractables, good melt strength and low odour and taint are desirable. Additive free.						
LDN248	7.6	0.922	Liquids packaging and other sensitive food packaging laminates where low extractables and low odour and taint are desirable. Additive free.						
LD1217	12	0.918	Liquids packaging and other sensitive food packaging laminates where high line speed, low neck-in, low extractables and low odour and taint are desirable. Additive free.						

Alkathene® LDPE Injection Moulding Grades

Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications
XDS34	0.3	0.922	Small part injection moulded caps and closures. Additive free.
XJF143	2.5	0.920	Injection moulded caps and closures, and thick-walled sections. Additive free.
LDN248	7.6	0.922	Injection moulded caps and closures. Additive free.
WRM124	22	0.920	High flow resin for reseal lids, housewares and toys where excellent gloss, low warpage and flow to toughness ratio are desirable. Additive free.
LD6622	70	0.922	High flow resin for lids and other thin wall injection moulding applications. Additive free.

Alkatuff	Alkatuff [®] LLDPE Injection Moulding Grades												
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm³)	Applications										
LL820	20	0.925	Injection moulding and compounding applications such as housewares and lids.										

Alkatane® HDPE Injection Moulding Grades			
Grade	Melt Index* (g/10 min@190°C, 2.16kg)	Density [#] (g/cm ³)	Applications
HD0390	4	0.955	Stackable crates for transport, storage and bottles and industrial mouldings where very good mechanical properties are desirable.
HD0490	4.5	0.955	Stackable crates for transport, storage and bottles, and industrial mouldings where very good mechanical properties are desirable.
HD0790	7	0.956	Industrial pails, crates, closures and sealant cartridges where a good balance between flow and impact resistance is desirable.
HD1090	10	0.956	Industrial pails, crates, closures and sealant cartridges where a good balance between flow and impact resistance is desirable.
HD2090	20	0.956	Housewares, thin-walled containers and closures where excellent mould flow and flexibility is required.
HD3690	36	0.956	Housewares, thin-walled mouldings and closures where excellent mould flow and flexibility is required.

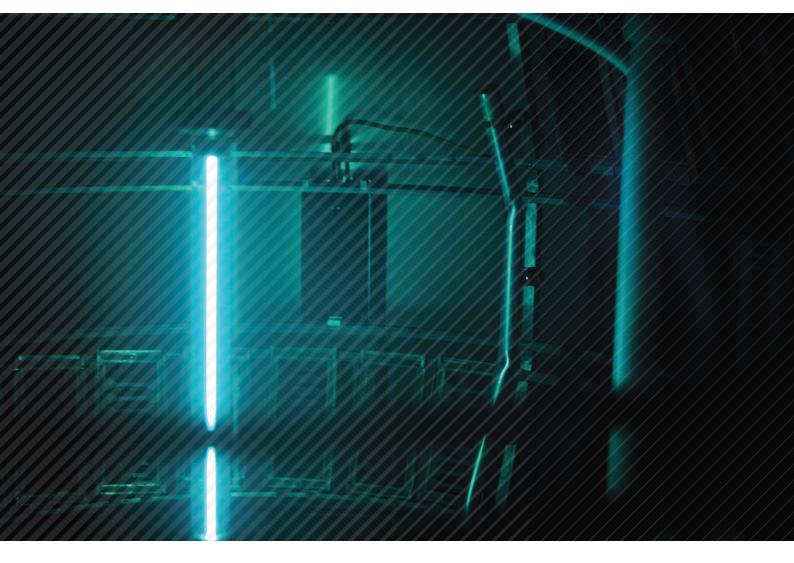
Qenos imported polymers and additives

eXsource – Qenos' specialty distribution arm – offers a direct channel to a range of local and international specialty polymers. eXsource supplies a wide range of polymers manufactured by Qenos, Bluestar, LyondellBasell and others. These polymers and additives are used in flexible packaging films, injection moulding, blow-moulding, hot-melt adhesive applications, polymer and wax modification, pipe and cable, bitumen modification and other polymer conversion processes. For the full range, please visit www.exsource.com or call your Account Manager.

*Melt Index according to ASTM D1238 unless otherwise annotated. #Density according to ASTM D1505 unless otherwise annotated.







Front Cover: Pellet geometry and pellet quality can have a significant effect on material flow and the efficiency of feeding polyethylene into an extruder. Qenos measures pellet quality using a pellet shape and size distribution analyser, a device that photographs around 10,000 pellets in 4 minutes, digitally analyses the images and generates a report on pellet quality. Where a drift in the pellet quality is detected, adjustments are made proactively to maintain high product integrity.

Rear Cover: The standard for UV performance for PE Water Tanks specified in AS/NZS 4766 PE Tanks for the Storage of Chemicals and Water is 8,000 hours of uninterrupted exposure to an intense and specifically developed UV light source. Qenos exhaustively tests the long term UV performance of its Rotational Moulding Resins under conditions of controlled irradiance, chamber temperature and humidity and repeated rain cycles. Alkatuff® 711UV achieves a class leading UV performance exceeding 20,000 hours against the required standards, ensuring that Alkatuff® 711UV is "Tough in the Sun".

The contents of this document are offered solely for your consideration and verification and should not be construed as a warranty or representation for which Qenos Pty Ltd assumes legal liability, except to the extent that such liability is imposed by legislation and cannot be excluded. Values quoted are the result of tests on representative samples and the product supplied may not conform in all respects. Qenos Pty Ltd reserves the right to make any improvements or amendments to the composition of any grade or product without alteration to the code number. The applications listed are based on the usage by exisiting Qenos customers. In using Qenos Pty Ltd's products, you must establish for yourself the most suitable formulation, production method and control tests to ensure the uniformity and quality of your product is in compliance with all laws and your requirements.

11th Edition November 2019

Qenos Pty Ltd

ABN 62 054 196 771 NZBN 9429047198722

471 Kororoit Creek Road Altona, Victoria, 3018 Australia

Australia Private Mail Bag 3

Altona, Victoria, 3018

Toll free: 1800 331 230 Local: (03) 9258 7333 International: +61 3 9258 7333

New Zealand PO Box 112321

Penrose, Auckland, 1061 Toll free: 0800 440 901

Local: (09) 884 4103 International: +64 9 884 4103



customer.service@qenos.com qenos.com

Qenos, the Qenos brandmark, eXsource, Alkathene, Alkatuff, Alkamax, Alkadyne and Alkatane are trade marks of Qenos Pty Ltd