



REPSOL RECICLEX® – TOWARDS A CIRCULAR ECONOMY

Genos eXsource are proud to offer Repsol Reciclex® to our customers in Australia and New Zealand.

Reciclex is a range of polyolefins that incorporate mechanically recycled materials while delivering consistent quality and functionality at a level you would expect from virgin materials. With Repsol Reciclex, polymer processors can reach new markets and more technically demanding applications with a high level of recycled content.

The technical team at Genos has undertaken a comprehensive evaluation of the Reciclex grades in its Technical Centre in Altona, Melbourne. Using Reciclex non food contact grades which are designed for blown film extrusion, several films were manufactured and compared to a film made with a blend of virgin LLDPE and LDPE. Test results indicate that by using Reciclex, film manufacturers can achieve the same performance in a film containing 50% post consumer recycle as can be achieved with a 70:30 blend of virgin LLDPE and LDPE.

Please find test results summarised below and film samples attached.

Film Properties (1)	Test Method	Units	Reciclex 50RX2805F	Reciclex 70RX2805F	Reciclex 80RX2310F	Blend of LL601 and 80RX2310F	Blend of LL601 and LDH215
Haze	ASTM D1003	%	14	14.7	14.9	12.1	10.8
Gloss 45 degrees	ASTM D2457	GU	50	49	52	62	66
Dart Drop impact (F50)	ASTM D1709	g	75	86	114	108	109
Puncture Maximum Load		N	38	45	46	44	43
Puncture Resistance		J	1.17	1.61	1.73	1.69	1.62
Tear Strength (MD)	ASTM D1922	mN	690	910	1996	1930	1820
Tear Strength (TD)	ASTM D1922	mN	6196	7475	8535	10318	10863
Polymer Properties	Method	Unit					
Density	ASTM D1505	–	0.924	0.922	0.922	0.924	0.924
Melt Flow Rate, 190°C/2.16kg	ASTM D 1238	g/10 min	0.6	1	1	1	1
% Post Consumer Recycle	ISO 62	%	50	70	80	50	0
LLDPE:LDPE ratio	ISO 62	%	25:75	35:65	50:50	70:30	70:30

(1) = tested on ~50um film thickness

Contact If you would like further information regarding these materials, please contact your eXsource Account Manager or Melanie Dodman at melanie.dodman@qenos.com

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