



THE FUTURE OF
E-COMMERCE PACKAGING
IS HERE

TECHNICAL DATA SHEET

ecoMLR is a protective, insulated, recyclable, paper-based packaging product. Lightweight and impact-resistant, it offers a sustainable packaging solution that helps you meet the highest sustainability standards.



Simple to recycle
with household
paper waste



Bespoke printing
and branding
opportunities



Reusable with
no single-use
plastic

Paper		Results by paper weight							
Test	Specification		70	80	90	100	110	120	
Thickness (µm)	ISO 534		84	96	108	120	132	144	
Tensile strength (kN/m)	ISO 1924/2	MD	5.0	5.3	5.9	6.0	6.2	6.6	
Tensile strength (kN/m)	ISO 1924/2	CD	2.3	2.7	3.0	3.0	3.1	3.5	
Break strain (%)	ISO 1924	MD	2.0	2.0	2.2	2.3	2.4	2.5	
Break strain (%)	ISO 1924	CD	5.0	5.0	5.0	5.0	5.0	5.0	
Tear through resistance min. (mN)	ISO 1974	MD	500	660	780	920	980	1000	
Tear through resistance min. (mN)	ISO 1974	CD	580	750	850	950	1050	1100	
Tear through resistance index (mNm ² /kg)	ISO 1974	MD	7,1	8,2	8,6	9,2	8,9	8,3	
Tear through resistance index (mNm ² /kg)	ISO 1974	CD	8,3	9,4	9,4	9,5	9,5	9,1	
Burst strength min. (µm)	ISO 534		240	250	260	290	320	360	
Burst strength index			3.4	3.1	2.9	2.9	2.9	3.0	
Air permeability (ml/min)	DIN 53120/1		240	250	260	270	280	300	
Roughness	BENDTSEN MW (ml/min), FROM 53 108	SS	180	180	180	180	180	160	
Roughness	BENDTSEN MW (ml/min), FROM 53 108	YOU	300	360	400	450	450	600	
Seal strip									
Seal strip (white tape)	Supplied		100	100	100	100	100	100	
Seal strip (adhesive)	Supplied		High tack proprietary						
Adhesion to paper*	Supplied		167 grams/cm ²						
Mechanical properties									
Impact resistance (inside/out)*	ISO 7765		102	104	105	106	108	109	
Impact resistance (outside/in)*	ISO 7765		102	104	105	106	108	109	

* Currently undergoing updated testing. All paper is a minimum of 75% recycled material.

Additional specifications

Thermal properties (ecoMLR thermal)
R value between 1.14 – 1.21

Mechanical properties (ecoMLR protect)

- Thickness between 10 and 20mm depending on application
- Proprietary chemistry, using TEMs in a captive matrix

Sealer and peel strip

- Silicon and adhesive strip (optional)
- Silicon peel strip, removed prior to re-use and discarded

Adhesives

Proprietary formulations used to seal the edges and layers of the mailer

Accreditation

Cyclos
All of the ecoMLR family are accredited by Cyclos-HTP institute in Germany and have undergone rigorous testing and certification as recyclable and/or curb side recyclable

OPRL

The mailer is compliant under the current OPRL specifications

sales@ecomlr.com
ecomlr.com



PARAGON

EcoMLR Limited

Company number 14141751 • Address: Whitehall Park, Whitehall Road, Leeds LS12 5XX • Registered office: Lower Ground Floor, Park House, 16-18 Finsbury Circus, London EC2M 7EB
VAT registration no – GB 100 1302 13