

Services List

Econotech Services Ltd.

www.econotech.com

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Address:
852 Derwent Way
Delta, BC V3M 5R1
Canada

This document lists the standard tests and services available at Econotech. For additional information, custom services and pricing please contact us.

SAMPLE SHIPMENT - Please provide a purchase order with each shipment. Samples should be shipped prepaid.

RUSH ANALYSES - Econotech can accommodate your requirements for rush analysis. Rush service may be subject to a surcharge.

US CUSTOMERS - Samples can easily be shipped to our facility. Please consult our website for detailed shipping instructions. Shipping instructions can be found in the "Contact Us" section of our website.

SAMPLE STORAGE - Samples will be retained at Econotech for a period of three months from time of sample receipt (where appropriate). Samples will be discarded unless prior arrangements have been made.

For more information regarding specific services at Econotech, please call us at 604-526-4221 or 1-800-463-5700

Service	Contact	Local	Email
General Information			info@econotech.com
Quality Assurance	Donna Johannes	237	donnaj@econotech.com
Chemical and Liquor Analysis	Thomas Yuen	238	tom@econotech.com
Pulp and Paper Testing	Sandra Fodor	253	sandra@econotech.com
Pulp and Paper Testing	Yolanda Cahoon	234	yolanda@econotech.com
Contaminant ID	Eric Chao	265	eric@econotech.com
Microscopy, Species ID and Asbestos	Jodi Murphy	256	jodi@econotech.com
Microscopy, Species ID and Asbestos	Heather McLeod	255	heather@econotech.com
Environmental Analysis	Jodi Murphy	256	jodi@econotech.com
Environmental Analysis	Lien Vu	226	gc@econotech.com
Environmental Analysis	Hur Begum	246	env@econotech.com
Organic Halide Analysis (AOX)	Jodi Murphy	256	jodi@econotech.com
Pulping and Bleaching Pilot Plant Studies	Keith Becker	233	keith@econotech.com
Dissolving Pulp End-Use Testing	Ralph Abley	232	ralph@econotech.com
Reburned Lime Analyzer	Ralph Abley	232	ralph@econotech.com

PULP, PAPER AND BOARD PHYSICAL TESTING AND RELATED SERVICES

TAPPI, PAPTAC, ISO AND SCAN methods are available for most tests.

Please contact Sandra Fodor or Yolanda Cahoon at 604-526-4221 or 1-800-463-5700 for more information.

Test	Reference	
<u>PHYSICAL PROPERTIES</u>		
Pulp strength evaluation		
PFI mill, 5 points includes CSF, basis weight, burst, tear, tensile, bulk, tensile energy absorption (TEA), stretch	TAPPI T248/PAPTAC C.7	
PFI mill, 5 points includes CSF, basis weight, burst, tear, tensile, bulk, TEA, stretch, fracture toughness	TAPPI/PAPTAC	
PFI mill, single point includes CSF, basis weight, burst, tear, tensile, bulk, TEA, stretch	TAPPI/PAPTAC	
Valley Beater, 5 points includes CSF, basis weight, burst, tear, tensile, bulk, TEA, stretch	TAPPI T200/PAPTAC C.2	
Freeness: Canadian Standard	TAPPI T200/PAPTAC C.1	
Simulated Flakt drying (pulp preparation for PFI evaluation)		
Mechanical pulp evaluation		
Mechanical pulp handsheets includes latency removal, (Domtar mixer), CSF, basis weight, burst, tear, tensile, bulk, TEA, stretch	TAPPI T262/ PAPTAC C.8P	
Post Latency Freeness (Domtar mixer)	TAPPI T262/ PAPTAC C.8P	
White water recirculation		
Mechanical pulp handsheets includes latency removal, (Domtar mixer), CSF, basis weight, burst, tear, tensile, bulk, TEA, stretch	TAPPI T262/ PAPTAC C.8P	
Bauer McNett Fiber Classification		
4 fractions, +14, +28, +48 and +100 mesh	TAPPI T233	
5 fractions, +14, +28, +48, +100 and +200 mesh	TAPPI T233	
Britt Jar Fines	TAPPI T261	
Pulmac Shive Analyzer (0.004", 0.006", 0.010")	TAPPI T274	
Handsheet preparation Includes CSF		
Handsheet testing includes basis weight, burst, tear, tensile, bulk, TEA, stretch		TAPPI T220/PAPTAC D.12
Machine made sheets includes basis weight, burst, bulk, tensile, TEA, stretch and tear (md and cd)		TAPPI/ PAPTAC

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Test	Reference
Moisture determination	
machine made sheets, multiple layers, wet pulps	TAPPI T412 (reference only)

ADDITIONAL PHYSICAL STRENGTH TESTS

Basis weight, machine sheets, single test	TAPPI T410
Castor oil absorption	TAPPI T462
Dennison wax pick	TAPPI T459
Drainage time	TAPPI T221
Fold, MIT	TAPPI T511
Grease resistance of paper	TAPPI um-430
Internal bond, Scott	TAPPI T569
Kit Level, oil absorption	TAPPI T559
Klemm Absorption	ISO 8787
K & N ink absorbency	TAPPI um-595
Modulus of elasticity	
Mutek, Demand and Charge	
Porosity, Gurley	TAPPI T460
Porosity, Sheffield	TAPPI T547
Porosity, Parker Print Surf	
Repulpability	
Ring crush	TAPPI T822
Roughness, Parker Print Surf, wire and felt side	TAPPI T555
Short span, dry or wet, Pulmac	
Shrinkage	
Silver tarnishing	TAPPI T444
Sizing, degree of sizing in paper, Hercules size test	TAPPI T530
Smoothness, Gurley	
Smoothness, Sheffield	TAPPI T538
Softness, Gurley	
Short Span Compression Strength, STFI	TAPPI T826
Stiffness, Gurley	TAPPI T543
Stiffness, Taber	TAPPI T566
Tensile, rewetted	TAPPI T456
Water absorption, Water Drop Method	TAPPI T432
Water absorption, Cobb test	TAPPI T441
Water resistance of paper, wire side and felt side	TAPPI T433

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Test	Reference
Water retention value	TAPPI um-256
Water vapor transmission rate: 23°C and 50% RH	TAPPI T448
38°C and 90% RH	TAPPI T464
Wet web tensile @ 30% solids incl. TEA and stretch Zero span, dry or wet, Pulmac	
Fracture Toughness (In-Plane Tear) as received, handsheet or PFI evaluations	SCAN P77:95
Optical properties Brightness, recast sheet Elrepho, Technibrite, TB-1C	TAPPI T525/T218, PAPTAC E.1, ISO 3688-99 (E)
Brightness, reversion @105°C, initial brightness included	TAPPI um-200
Color, CIE L*, a*, b*, Technidyne TB-1C	TAPPI T527
Color, Hunter L,a,b , Technidyne TB-1C	TAPPI T527
Fluorescence, Technidyne TB-1C	TAPPI T452 (reference only)
Gloss 75°	TAPPI T480
Gloss 20°	TAPPI T653
Light scattering coefficient	TAPPI T220
Light absorption coefficient	TAPPI T220
Opacity, Elrepho, Technidyne TB-1C	TAPPI T519
Tristimulus, x, y, z, Technidyne TB-1C	TAPPI T527
Whiteness, Technibrite TB-1C	TAPPI T560
Dirt and shive evaluation Dirt on pulp (reflected), machine sheets, slush pulps	TAPPI T213/TAPPI T437
Dirt on pulp (transmitted), machine sheets, slush pulps	TAPPI T246
Dirt count, Spec scan, machine sheets, slush pulps	Apogee spec scan method
Fiber characteristics Fiber Quality Analyzer, fiber length, coarseness, kink index, curl, percent fines	TAPPI T271
Fiber Quality Analyzer, WWAFL, Bauer McNett (4 fractions)	TAPPI T271/TAPPI T233
Printability MBR Print Indicator, wire and felt side	

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Test	Reference
Fluff pulp properties	
Conditioned basis weight, pulp sheet	TAPPI T410
Fluffing, Weber hammer mill, pulp sheet	
Fiber damage (FD) ratio using Bauer McNett Fiber Classification	TAPPI T233
Hardness index, pulp sheet	TAPPI T403/TAPPI T411
Neps or nodules	
Specific volume, resiliency, absorption capacity and time	SCAN C33.80
Sanitary product testing, tissue, towel, diaper testing	
Talc, clay and lime analysis	
Bulk density, loose and compacted	
Oil absorption	
Water absorption	ASTM D281-31
Brightness	TAPPI T534
Filler and additive evaluations	
Specialty tests and services	
Density	ASTM E605-93
Absorbency and Capacity, Fabric	ASTM D1117
Face wire replacement (British standard sheet machine grid plates)	