

BF-Plainstainproof

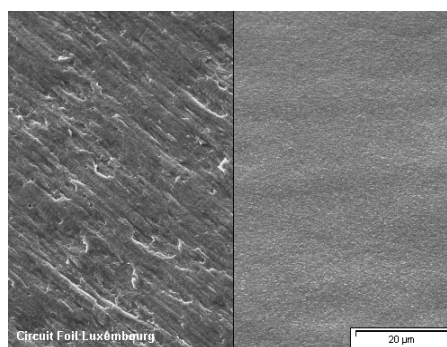
Technical Characteristics

BF is an ultra flat electrodeposited copper foil without any additional bonding treatment. This foil is characterized by an extremely fine grain structure and superior mechanical properties which ensure excellent bendability in either direction.

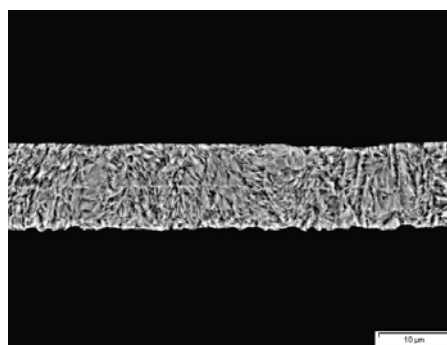
Its exceptionally low profile makes it very suitable for Lithium-ion batteries where a Graphitic carbon is bonded to the copper foil in order to form the current collector.

The very thin BF-Plainstainproof foils are widely used in all kind of Lithium-ion batteries for notebooks, PDA's, and mobile phones. It is an ideal solution for large size and high power batteries as required by Hybrid Electrical Vehicles (HEV).

• Please visit our website (www.circuitfoil.com) for regular updates.



drum side / electrolyte side
cross section



Typical average properties

BF-Plainstainproof							
MEASURED PARAMETERS	UNITS	PRODUCT GAUGE				IPC	
Nominal Thickness	μm oz.	9 1/4	10 -	12 3/8	18 1/2	Specification IPC-4562A	Test Method IPC-TM-650
Area Weight ($\pm 5\%$)	oz/ft ²	0.27	0.29	0.34	0.48	(a)1.2.5, table 1-1	2.2.12
	g/m ²	82	90	105	148	(b)3.4.4	
	g/254 in ²	13.4	14.7	17.2	24.3	(c)4.6.3	
Drum Side Roughness (Ra)	μm $\mu\text{.inch}$	0.20 - 0.40 8 - 16				3.5.6	2.2.17
Drum Side Roughness (Rz)	μm $\mu\text{.inch}$	1.0 - 3.0 39 - 118				3.5.6	2.2.17
Electrolyte Side Roughness (Rz)	μm $\mu\text{.inch}$	1.5 - 3.0 59 - 118				3.4.5	2.2.17
Tensile Strength Transverse at RT	MPa k.Lb/in ²	> 315 > 46				3.5.1	2.4.18
Tensile Strength Transverse at 180 °C	MPa k.Lb/in ²	> 180 > 26				3.5.1	2.4.18
Elongation Transverse at RT	%	> 5		> 7	> 12	3.5.3	2.4.18
Elongation Transverse at 180 °C	%	> 8		> 12	> 15	3.5.3	2.4.18
Resistivity	$\Omega\text{g/m}^2$	< 0.171		< 0.170	< 0.166	3.8.1.2	2.5.14
Purity	%	> 99.8				3.8.1.1	2.3.15

All of this Technical Information has been determined with due care and thoroughness. However, because the conditions of use and process and application technologies employed can substantially vary, the provided data and figures can only serve as non binding guidelines. They do not constitute a guarantee that the purchased item will possess certain attributes. For this reason, no liability whatsoever can be assumed for them. The buyer is obliged to check the suitability of all supplied products.

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