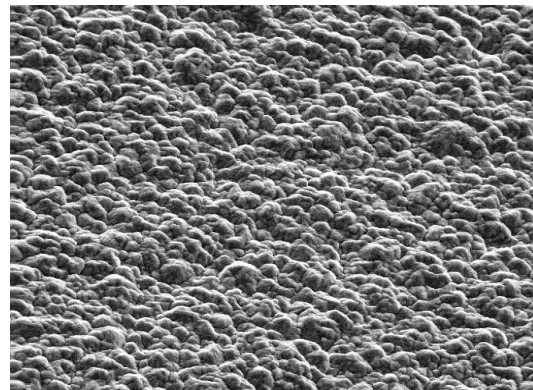
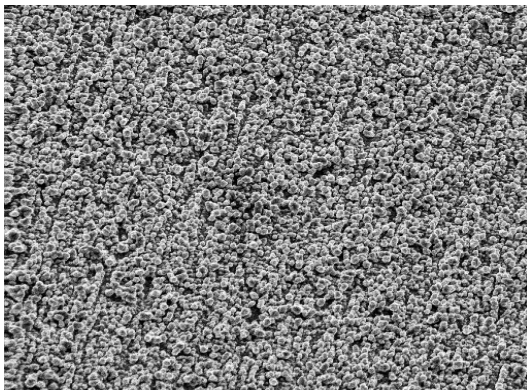


# MLS

MLS is a reverse-treated, Grade 3, controlled elongation foil. This product is designed for inner layer applications where controlled impedance and high density, fine lines are required. MLS is fully compatible with all epoxy resin systems.



Treated (Drum) Side MLS (1/2 Ounce)

Untreated (Matte) Side MLS (1/2 Ounce)

Nominal Thickness		microns	9	12	18	35	70	Performance Benefits
		oz/ft <sup>2</sup>	1/4	3/8	1/2	1	2	
Tensile	Ambient	Kpsi	60	60	60	55	52.5	•VLP bonding surface, minimal foil treatment residues after etching.
	180° C	Kpsi	30	30	30	30	30	
Elongation	Ambient	%E	>3	6	8	15	20	•Superior etch factor for fine lines.
	180° C	%E	8	8	8	8	8	
Roughness – Rz	Treated (Drum) Side	μinch	120	120	120	120	120	•Reduced costs through process step elimination during PCB fabrication.
Roughness – Rz	Untreated (Matte) Side	μinch	100	125	175	225	350	
Peel Strength B Condition Epoxy, Tg 170° C	Treated (Drum) Side	lbs/in	>5.0	6.0	6.0	8.0	11.0	•HTE characteristics eliminate inner foil cracking

\*Note: Nominal thickness is determined by area weight. Actual measured thickness may be slightly higher due to matte side topography.

The information contained in this data sheet is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. The actual performance of Mitsui materials will vary according to the customer's application.

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