



Prüfbericht - Nr.: <i>Test Report No.:</i>	IND/BLR/CH/2012/00178	Seite 1 von 2 <i>Page 1 of 2</i>			
Auftraggeber: <i>Client:</i>	LUCENT CLEANENERGY PVT. LTD., Block No.- 187, Opposite Laxminarayan Petrol Pump, B/h Sigma, Sarkhej Bavla Highway, Changodar, Ahmedabad - 382213, Gujarat, India. Reg. office : 14/15, First Floor, Pushpak Apt, Opp. Kaladarshan Flats, Prernatirth Derasar Road, Satellite, Ahmedabad-380015, Gujarat-INDIA				
Gegenstand der Prüfung: <i>Test item:</i>	EVA Sheet for Solar Modules, Brand: TOPEVA™ Fast Cure (TE100FC)				
Bezeichnung: <i>Identification:</i>	Brand: TOPEVA™ Fast Cure (TE100FC)	Serien-Nr.: <i>Serial No./Document Submitted:</i>	Acceptance of Quotation dated 09.01.2012		
Wareneingangs-Nr.: <i>Receipt No.:</i>	11012012	Eingangsdatum: <i>Date of receipt:</i>	11.01.2012		
Order No.:	1403018062	<i>Test Period:</i>	12.01.2012 to 25.02.2012		
Prüfort: <i>Testing location:</i>	TÜV Rheinland India Pvt Ltd, Plot No.17B, Electronic City, Phase 2, Hosur Road, Bangalore - 560 100, Karnataka, India.				
Prüfgrundlage: <i>Test specification:</i>	Customer's requirement Testing of EVA Sheet for Solar Modules				
Prüfergebnis: <i>Test Result:</i>	PASS. Meets with Requirements.				
Prüflaboratorium/ Testing Laboratory:					
zusammengestellt/ compiled by:		kontrolliert/ checked by:			
 Rajesh Jain B 25.02.2012 Manager - Industry Services		 P. Shanmugasundaram 25.02.2012 Country Head - Material Testing Laboratories, Industry Services			
Datum <i>Date</i>	Name <i>Name</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name <i>Name</i>	Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:					
Abkürzungen: ok / P = entspricht Prüfgrundlage fail / F = entspricht nicht Prüfgrundlage n.a. / N = nicht anwendbar			Abbreviations: ok / P = passed fail / F = failed n.a. / N = not applicable		
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. Test item is submitted by client</i>					

TEST RESULTS

 Test Item: EVA Sheet for Solar Modules, Brand: **TOPEVA™** Fast Cure (TE100FC)

Test / Parameter	Unit	Customers Specification	Result	Test Method
Tensile Strength	MPa	14 – 17	15.4	ASTM D 638, ASTM D 412
Elongation at Break,	%	600 - 700	635	ASTM D 638, ASTM D 412
Secant Modulus at 1% elongation	MPa	6 - 8	6.8	ASTM D 638, ASTM D 412
Hardness Shore-A after curing	-	75 Min.	76	ASTM D 2240
Peel strength (Glass/film)	N/Cm	70 Min.	75	ASTM D 638, ASTM D 412
Peel strength (TPT/film)	N/Cm	45 Min.	47	ASTM D 638, ASTM D 412
Specific Heat	J/g. k	1.96 Nominal	1.96	ISO 22007 Part 2
Optical Transmission after curing	%	92 Min.	> 92	ASTM E 424, Spectrophotometer
UV Cut Off Wavelength	nm	360	360	ASTM E 424, Spectrophotometer
Gel Content	%	88 - 92	> 90	ASTM D 2765-01
Refractive Index	-	1.49 Nominal	1.49	ISO 489
Volume Resistivity	Ohm.C m	> 1 x10 ¹⁴	> 1 x10 ¹⁴	ASTM D 257
Density	g/cm ³	0.96 Nominal	0.9612	ASTM D 792
Water Absorption	%	0.10 Max.	0.09	ASTM D 570

Remarks: The above tested material meets with characteristic requirements as per customer's specification

Notes:

'% ' denotes percentage by weight

'MPa' denotes Megapascals

'N/cm' denotes Newton / centimeter

THIS TEST REPORT IS FIRST OF ITS KIND FOR 14 TESTS ON EVA SHEET FOR SOLAR MODULE BY AN INDIAN MANUFACTURER

----- End of Report -----