

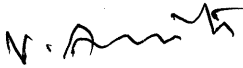
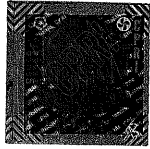
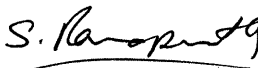


**DIAGNOSTICS, CABLES AND CAPACITORS DIVISION
INSULATION LABORATORY
CENTRAL POWER RESEARCH INSTITUTE
Sir C.V. Raman Road, P.B.NO.8066, BANGALORE-560 080
Phone no: 080-2360 2919 Ext 2391/2395 Fax: 080-23604435**

Sheet 1 of 5

CPRI

TEST REPORT

Test Report Number	INS/M/G/057/May/2010 dt: 06.05.10	
Name & Address of the Customer	M/s. RPG Cables Limited Hebbal Industrial Area, Hootagalli Belavadi Post, Mysore-570 018, India	
Customer's reference & date	P.O.No. RPGCL/Mys/QA/001/09-10 dt.08.03.2010	
Name & Address of the Manufacturer	M/s. RPG Cables Limited Hebbal Industrial Area, Hootagalli Belavadi Post, Mysore-570 018, India	
Particulars of sample tested/calibrated	PVC Sheath and XLPE Insulation of 3x16 mm ² , Copper conductor, XLPE Insulated, PVC Sheathed, Galvanized Formed wire armoured 1100 Volts Cable Embossing: MAR 2010 3CX 16 SQ.MM XLPE FR-LSH 1100 VOLTS, GT 9768617055	
Condition of Sample on Receipt	Received in good condition	
Type	Nil	
Designation	Nil	
Serial Number	Nil	
Number of samples tested	One	
Dates(s) of Test (s)	23.03.10 to 27.04.10	
CPRI sample code no	DCCDCAB10S0023	
Particulars of tests conducted	UV Radiation and Hydrolytic Stability tests	
Test in accordance with standard/specification	In general accordance with DIN 53387-86, ASTM D 3137-81 (RA-2001), IS:10810-1984 and as per customer's request	
Sampling plan	NA	
Customer's requirement	Nil	
Deviations if any	Nil	
Name of the witnessing persons		
Customer representatives	None	
Other than Customer's representatives	None	
Test/Calibration subcontracted with address of the laboratory	NA	
Documents constituting this report (in words)		
Number of sheets	Five	
Number of Oscillogram/s	Nil	
Number of Graphs	Nil	
Number of photos	Nil	
Number of test circuit diagrams	Nil	
Number of Drawings	Nil	
 (V.ASAITHAMBI) TEST ENGINEER		 (S. RAMAPRASATH) JOINT DIRECTOR
AUTHORISED SIGNATORIES		



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CPRI

Continuation of Test Report

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DCCDCAB10S0023

Laboratory conditions:

Laboratory temperature : 23±5°C

Test Parameters for UV Radiation test (Xenon- arc method):

Instrument used : Ci4000 Xenon Weather-O-meter
Type of light source and Wattage : Xenon Arc Lamp, 2500 - 6500 Watt, water cooled
Spectral radiation at sample location : Spectral Irradiance: 0.4W/m².nm at Wavelength 340nm
UV Exposure conditions : Method: Wetting and humidifying method 'A',
Exposure Cycle : Mode of operation: Continuous exposure
Duration of wetting : 18 min light and water spray (air temperature not controlled)
Dry Interval : 102 min light at 63 to 67°C (set at 65°C)
Relative Humidity : 60 to 80% (set at 70%)
Black standard temperature : 63 to 67°C (set at 65°C)
Type of Spray water : Purified Water by deionization and reverse osmosis.
Specimen/sample employed : Dumb-bell specimen PVC sheath as per
Fig.1 of IS10810 (Part 7-1984) RA -2006
Number of specimen tested : Four
Test duration (UV exposure period) : 360 hours UV radiation as per the customer's request

TEST RESULTS

Sl. No.	Test Conducted	Observations/ Results obtained
1.	UV radiation for 360 hours Visual Examination	1) No Colour fading of the sample was observed. 2) Surface of the sample was free from cracks and blisters


(V.ASAITHAMBI)
TEST ENGINEER



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Laboratory conditions:

Laboratory temperature : 23±5°C

Test Parameters for Tensile Strength & Elongation at Break (before and after UV radiation):

Instrument used : Universal Testing Machine (50KN)
Load cell : 500 N, Range selected: 200N
Speed : 250mm/min
Specimen/sample employed : Dumb-bell specimen of PVC Sheath as per
Fig.1 of IS10810 (Part 7-1984) RA -2006
Gauge length : 20mm
Number of specimen tested : Four
Conditioning/Ageing : Subjected to 360 hours of UV radiation as per page No. 2 of 5

TEST RESULTS

Sl. No.	Tests Conducted	Observations/ Results obtained	
		Before UV Radiation	After UV Radiation
2.	Tensile Strength (N/mm ²)	16.5	16.2
3.	Elongation at break (%)	233	230

V. Asaithambi

(V.ASAITHAMBI)
TEST ENGINEER



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Laboratory conditions:

Laboratory temperature : 23±5°C

Test Parameters for Hydrolytic Stability Test and Tensile Strength & Elongation at Break:

Instrument used : WEISS TECHNIK Environmental chamber, Giant Force Oven,
Universal Testing Machine (50KN)
Load cell : 500 N, Range selected: 200N
Speed : 250mm/min
Specimen Employed : Dumb-bell specimen of three core insulation (Red, Yellow, Blue)
as per Fig.2 of IS10810 (Part 7-1984) RA -2006
Gauge length : 10mm
Number of specimen tested : Four
Conditioning/Ageing : As per clause 5 of ASTM D3137-81(RA 2001), Conditioned specimens
at 85±1°C for 96 hours followed by 23±2°C, 50±5%RH for 96 hours

TEST RESULTS

Sl. No.	Tests Conducted	Observations/ Results obtained	
		Before Hydrolytic Stability	After Hydrolytic Stability
4.	Tensile Strength (N/mm ²)		
	Red Core Insulation	16.7	13.8
	Yellow Core Insulation	15.5	15.4
	Blue Core Insulation	16.8	16.6
5.	Elongation at break (%)		
	Red Core Insulation	640	570
	Yellow Core Insulation	575	545
	Blue Core Insulation	600	565

V. Asai

(V.ASAITHAMBI)
TEST ENGINEER



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NOTE

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this report/certificate in any form other than by complete set of the whole report and in the language written is not permitted without the written consent of CPRI.
- c) Any correction/erasure invalidates this test report/certificate.
- d) Any anomaly/discrepancy in this test report/certificate should be brought to our notice within 45 days from the date of issue.
- e) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.

**(V.ASAITHAMBI)
TEST ENGINEER**