

TCR ENGINEERING SERVICES PVT. LTD.

ENGINEERING MATERIAL TESTING, CERTIFICATION, INSPECTION, CONSULTING, SURVEYING, NDT SERVICES, HEAT TREATMENT, PHYSICAL, CHEMICAL & METALLURGICAL TESTING.

APPROVED BY GOVT. OF INDIA - DEPT. OF SCIENCE & TECHNOLOGY

FOR CHEMICAL and MECHANICAL TESTING

TRUST - COMPETENCE - RELIABILITY

Managing Director VIRENDRA K. BAFNA B. E. M. Eng. (Canada) M.S.I.M. (U.S.A.) M. A. S. T. M.

TCR / QF 5101

Regd: Office & Laboratory 35, Pragati Industrial Estate, N.M. Joshi Marg, Mumbai-400 011. Tel.: 23097921, 23097923, 23092347, 23091938

Fax: 91-22-23080197 Website: www.tcreng.com Laboratory:

Plot No. EL - 182, M.I.D.C., TTC,

Electronic Zone, Mahape, Navi Mumbai - 400 710. Ph.: 022-67380900 - 999

Fax: 2761 2044 Email: sales@tcreng.com

: sales@tcreng.com Certificate No. NABL



Certificate No. NABL - T - 368 NABL ISO 17025 ACCREDITED LABORATORY

TEST CERTIFICATE

TEST CERTIFICATE No:

AY/3519-30

Dated: 08.05.2014

Page 01 of 02

ISSUED TO:

GALA THERMO SHRINK PVT. LTD.

MALAD (W) MUMBAI - 400 064

TEST DATE:

08.05.2014

TEST LOCATION:

TCR Engg. Services Pvt. Ltd., Mahape, Navi Mumbai.

PARTY'S REFERENCE:

Mail Dt. 08.05.2014

TEST METHOD:

With Reference to IEC - 62321/Ed 1.0/2008-12

TEST INSTRUMENT:

PORTABLE XRF SPECTROMETER, MODEL INNOV - X

Mfg By INNOV-X SYSTEMS EUROPE B V

TEST PURPOSE:

TO SCREEN FOR R.O.H.S. REQUIREMENTS

Requirement	Hg	Br	Br Pb		Cd
Polymer Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(300-3δ)<x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)<(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<></td></x<(1300+3>	P≤(300-3δ) <x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)<(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<>	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)<(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)<(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F
Metallic Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td></td><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>$P \le (70-3\delta) < (130+3\delta) \ge F$</td></x<></td></x<(1300+3></td></x<(1300+3>		P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>$P \le (70-3\delta) < (130+3\delta) \ge F$</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>$P \le (70-3\delta) < (130+3\delta) \ge F$</td></x<>	$P \le (70-3\delta) < (130+3\delta) \ge F$
Electronics	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(250-3δ)<x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD< X <(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<></td></x<(1500+3>	P≤(250-3δ) <x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD< X <(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<>	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD< X <(250+3 δ) ≥F</td></x<></td></x<(1500+3>	P≤(500-3δ) <x< td=""><td>LOD< X <(250+3 δ) ≥F</td></x<>	LOD< X <(250+3 δ) ≥F

TEST FINDINGS

	Specified Elements	<u>Hg</u>	<u>Br</u>	<u>Pb</u>	<u>Cr</u>	Cd	
	Item Description	←	REMARK				
		Max	Max	Max	Max	Max	ALDI-MAIL
1	Heat Shrink End Cap	ND	17 (P)	ND	ND	ND	PASS
2	Heat Shrink Breakout	ND	14 (P)	ND	ND	ND	PASS
3	Heat Shrink Straight/Right Angle Boot	ND	ND	ND	ND	ND	PASS
4	Heat Shrink Medium/Heavy Wall Tube	ND	ND	ND	ND	ND	PASS
5	Heat Shrink Medium/Heavy Wall Busbar Tube	ND	ND	ND	ND	ND	PASS
6	Heat Shrink Thin Wall Tube	ND	3714 (INC)	ND	ND	ND	INC

Remark: All Materials mentioned above are ROHS compliant in accordance with ROHS directive 2011/65/EU & It's subsequent amendments directives.

P = Pass F = Fail

INC. = Inconclusive

ND = Not Detected

Pm/-



Authorized Signatory
A P. INAMDAR (MGR. INT)

1) The results relate only to the sample tested.

Test Certificate shall not be re - produced except in full without the written approval of laboratory.

While 'TCR' has made their best endeavors to provide accurate and reliable information, 'TCR' is not responsible for any financial liability due to any act of omission or error made.



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TEST FINDINGS

	Specified Elements	<u>Hg</u>	<u>Br</u>	<u>Pb</u>	<u>Cr</u>	<u>Cd</u>	
	← <u>TEST_REQUIREMENTS</u> Item Description Mg/Kg - (PPM)						REMARK
		Max	Max	Max	Max	Max	
7	Heat Shrink Anode Cap	ND	ND	ND	ND	ND	PASS
8	Heat Shrink Rain Shed	ND	ND	ND	ND	ND	PASS
9	Busboot (UL Approved Batch)	ND	ND	ND	ND	ND	PASS
10	Busboot (Con Material)	ND	ND	ND	ND	ND	PASS
11	Busboot (LSF Material)	ND	ND	ND	ND	ND	PASS
12	Busboot (UV Stabilised Material)	ND	ND	ND	ND	ND	PASS

Remark: All Materials mentioned above are ROHS compliant in accordance with ROHS directive 2011/65/EU & It's subsequent amendments directives.

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