



## REPORT

CUSTOMER PO NO.:  
ALS THAILAND REF NO.: ATT/ELP/14/4404-G  
DATE: 26 March 2015  
COMPANY: SEI Interconnect Products (Thailand)Ltd.  
700/128 Moo 5 Bangna-Trad Road, T. Klong Tam Roo  
A. Muang, Chonburi 20000

DATE SAMPLE RECEIVED: 20 March 2015  
DATE ANALYZED: 18 March 2015  
DATE TEST COMPLETED: 24 March 2015

SAMPLE DESCRIPTION: One lot of sample was received with references:  
Description: RQ15-0383 Rembrandt APFA ww# 39  
After Crest# 11 cell# 13  
MinAik/EngTek/TI+SUMI/Rencol/NMB  
PN: 2053-209525-F15  
PR: 18kn00012860  
Model: Rembrandt APFA  
Surface Area: APFA = 143.00 cm<sup>2</sup> , AFA = 132.00 cm<sup>2</sup>

### METHOD/PROCEDURE:

Test	Procedure No	Number of pieces used for extraction	Extraction Medium	Extraction Volume
GCMS - Hydrocarbon Residue	2092-771690 Rev.AE	1	HPLC grade n-Hexane	30 mL

### Results:

The Specification is based on Western Digital's Doc 96-004575 Rev.AX for APFA with Dual Arm Damper / (EN Plated) (3.5" Enterprise & 3.5" Desktop)

Required Test	Analytes	Specification Limits(ng/part)	Result (ng/part)	PASS / FAIL
GCMS	Total C18-C40 Hydrocarbon and Surfactant	< 800	444.818	PASS
	- C18-C40 Hydrocarbon Peak	-	6.406	
	- Surfactant contained in Hydrocarbon Hump (e.g. DP154/ DP155)	-	438.412	
	Surfactant as DP154/155	-	3.951	
	Total Hexadecyl Esters of Fatty Acids	< 50	Not Detected	PASS
	Irgafos and Derivatives	< 100	0.595	PASS
	- Irgafos	-	Not Detected	
	- Irgafos-oxidized	-	0.595	
	Total Organic Compound	NA	651	



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Major Compounds (R.T)	Classification	Result (ng/part)
18.10	DEHP	112.816
14.71	Di-n-butyl phthalate	6.746
15.03	Isopropyl Palmitate	6.578
17.27	Hexanedioic acid, dioctyl ester	2.238
14.07	1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester	1.706

ALS Testing Services  
(Thailand) Co.,Ltd.

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