



**TEST REPORT**

NUMBER: SHAH00054994

APPLICANT: BOURNS, INC.  
 1200 COLUMBIA AVE., RIVERSIDE, CA  
 92507-2114, USA

DATE: APR 30, 2008

**SAMPLE DESCRIPTION:**

THREE (3) PIECES OF SUBMITTED SAMPLE SAID TO BE :  
 ITEM NAME : SMD: LEAD FREE PLATING:  
 (1) MIXED ALL PARTS OF BODY (BLACK NONMETAL).  
 (2) SILVER COLORED METAL PIN (SILVERY METAL).  
 (3) BLACK PLASTIC BODY WITHOUT SOLDER WAFER & DIE (BLACK PLASTIC).  
 ITEM NO. : SMC PACKAGE FAMILY.  
 MATERIAL : METAL & RESIN.

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**TESTS CONDUCTED:**

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)  
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TO BE CONTINUED

PREPARED AND CHECKED BY:  
 FOR INTERTEK TESTING SERVICES  
 LTD., SHANGHAI

AUTHORIZED BY:  
 FOR INTERTEK TESTING SERVICES  
 LTD., SHANGHAI

MYRA LV  
 CHEMICAL DIVISION MANAGER

STEPHEN TSANG  
 GENERAL MANAGER



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(A) TEST RESULT SUMMARY FOR RoHS DIRECTIVE:

<u>TESTING ITEM</u>	<u>RESULT (ppm)</u>
	(1)
CADMIUM (Cd) CONTENT (ppm)	ND (<2)
LEAD (Pb) CONTENT (ppm)	5030
MERCURY (Hg) CONTENT (ppm)	ND (<2)
CHROMIUM VI (Cr <sup>6+</sup> ) CONTENT (ppm) (FOR NON-METAL)	ND (<1)
POLYBROMINATED BIPHENYLS (PBBs)	
MONOBROMOBIPHENYL (MonoBB) (ppm)	ND
DIBROMOBIPHENYL (DiBB) (ppm)	ND
TRIBROMOBIPHENYL (TriBB) (ppm)	ND
TETRABROMOBIPHENYL (TetraBB) (ppm)	ND
PENTABROMOBIPHENYL (PentaBB) (ppm)	ND
HEXABROMOBIPHENYL (HexaBB) (ppm)	ND
HEPTABROMOBIPHENYL (HeptaBB) (ppm)	ND
OCTABROMOBIPHENYL (OctaBB) (ppm)	ND
NONABROMOBIPHENYL (NonaBB) (ppm)	ND
DECABROMOBIPHENYL (DecaBB) (ppm)	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	
MONOBROMODIPHENYL ETHER (MonoBDE) (ppm)	ND
DIBROMODIPHENYL ETHER (DiBDE) (ppm)	ND
TRIBROMODIPHENYL ETHER (TriBDE) (ppm)	ND
TETRABROMODIPHENYL ETHER (TetraBDE) (ppm)	ND
PENTABROMODIPHENYL ETHER (PentaBDE) (ppm)	ND
HEXABROMODIPHENYL ETHER (HexaBDE) (ppm)	ND
HEPTABROMODIPHENYL ETHER (HeptaBDE) (ppm)	ND
OCTABROMODIPHENYL ETHER (OctaBDE) (ppm)	ND
NONABROMODIPHENYL ETHER (NonaBDE) (ppm)	ND
DECABROMODIPHENYL ETHER (DecaBDE) (ppm)	ND

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<u>TESTING ITEM</u>	<u>RESULT (ppm)</u>
	(2)
CADMIUM (Cd) CONTENT (ppm)	ND (<2)
LEAD (Pb) CONTENT (ppm)	ND (<2)
MERCURY (Hg) CONTENT (ppm)	ND (<2)
CHROMIUM (VI) (Cr <sup>6+</sup> ) RESULT (FOR METAL)	N

<u>TESTING ITEM</u>	<u>RESULT (ppm)</u>
	(3)
LEAD (Pb) CONTENT (ppm)	ND (<2)

REMARKS:

ppm = PARTS PER MILLION = mg/kg

< = LESS THAN

ND = NOT DETECTED

N = NEGATIVE

THE SUBMITTED SAMPLE (1) WAS NOT HOMOGENEOUS MATERIAL AND SAMPLING RANDOMLY.

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

(B) RoHS REQUIREMENT

<b>RESTRICTED SUBSTANCES</b>	<b>LIMITS</b>
CADMIUM (Cd)	0.01% (100 ppm)
LEAD (Pb)	0.1% (1000 ppm)
MERCURY (Hg)	0.1% (1000 ppm)
CHROMIUM (VI) (Cr <sup>6+</sup> )	0.1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 ppm)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	0.1% (1000 ppm)

THE ABOVE LIMITS WERE QUOTED FROM 2002/95/EC AND AMENDMENT 2005/618/EC FOR HOMOGENEOUS MATERIAL.

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(C) TEST METHOD :

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 ppm
LEAD (Pb) CONTENT	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY ACID DIGESTION AND DETERMINED BY ICP - OES	2 ppm
MERCURY (Hg) CONTENT	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY ACID DIGESTION AND DETERMINED BY ICP - OES	2 ppm
CHROMIUM (VI) (Cr <sup>6+</sup> ) CONTENT (FOR NON-METAL)	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY ALKALINE DIGESTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	1 ppm
CHROMIUM (VI) (Cr <sup>6+</sup> ) CONTENT (FOR METAL)	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY BOILING WATER EXTRACTION AND DETERMINED BY UV- VIS SPECTROPHOTOMETER	0.02mg/kg with 50cm <sup>2</sup> (IN TESTING SOLUTION)
POLYBROMINATED BIPHENYLS (PBBs) & POLYBROMINATED DIPHENYL ETHERS (PBDEs)	WITH REFERENCE TO IEC 62321 - 111/95/CDV, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS/HPLC	5 ppm

NOTE: TESTS WERE CONDUCTED WITH REFERENCE TO 111/95/CDV VERSION  
2007-10-12 WHICH IS STILL A DRAFT METHOD AND SUBJECT TO FUTURE  
CHANGES PRIOR TO PUBLICATION.

REPORTING LIMIT=QUANTIZATION LIMIT OF ANALYZE IN SAMPLE

DATE SAMPLE RECEIVED : APR.28, 2008

TESTING PERIOD : APR.28, 2008 TO APR.29, 2008

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TO BE CONTINUED

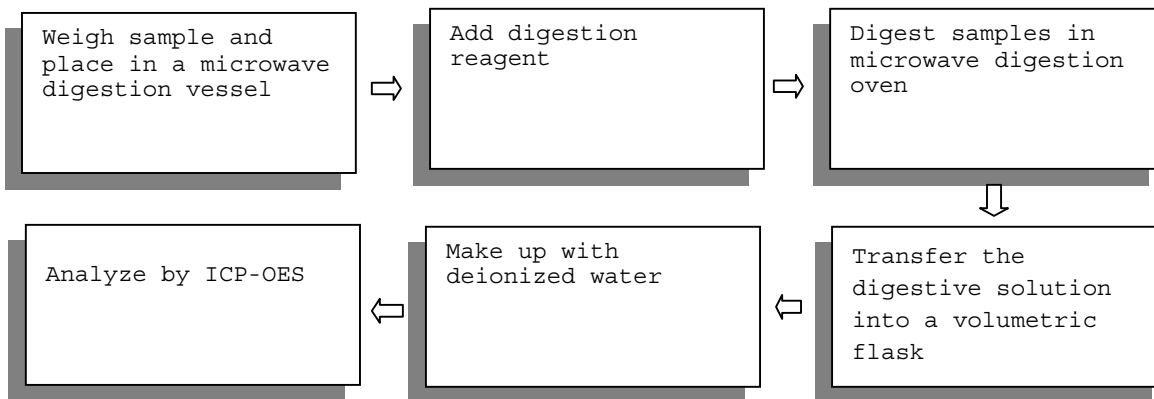
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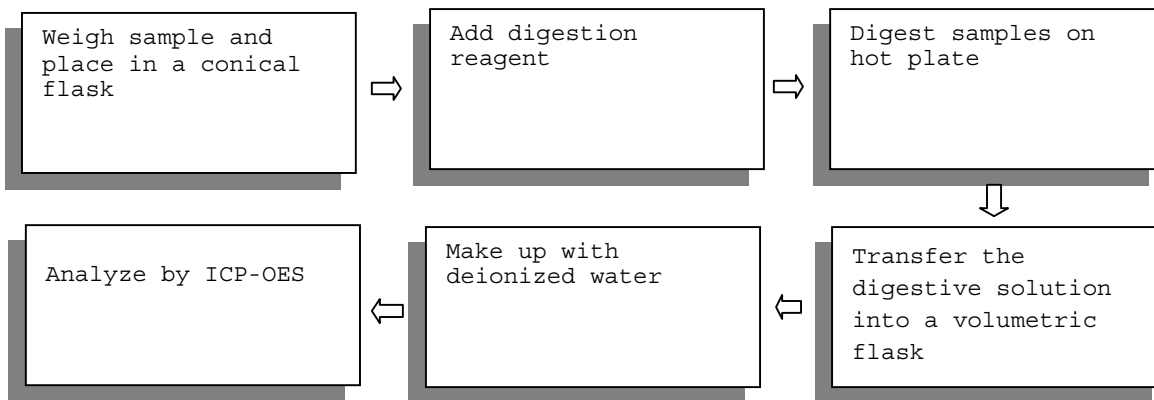
TESTS CONDUCTED

MEASUREMENT FLOWCHART (IEC 62321)

1. TEST FOR Cd/Pb/Hg CONTENTS



2. TEST FOR Cd/Pb CONTENTS



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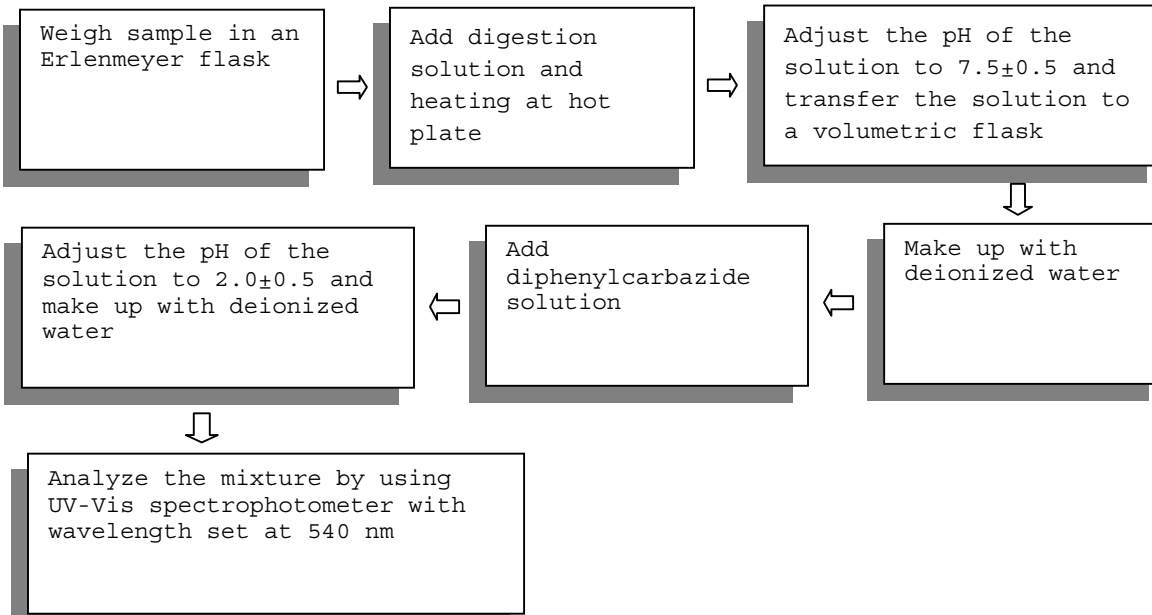
TO BE CONTINUED

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3. TEST FOR CHROMIUM (VI) CONTENT



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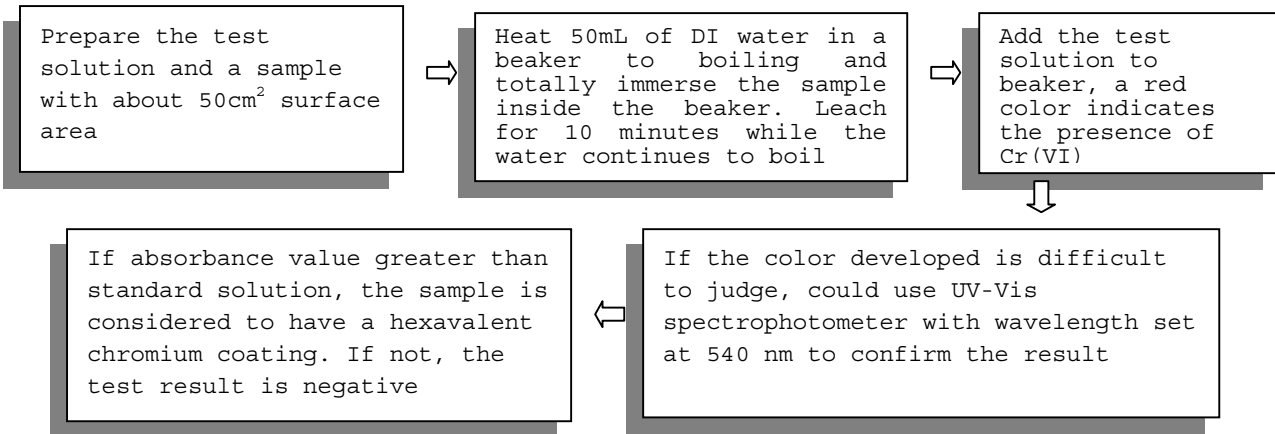
TO BE CONTINUED

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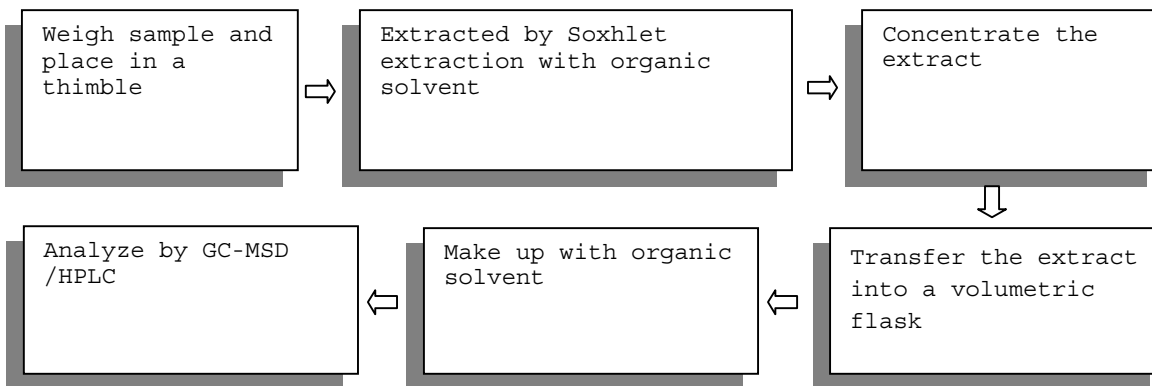
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4. TEST FOR CHROMIUM (VI) CONTENT (BOILING WATER EXTRACTION ON METAL)



5. TEST FOR PBBs/PBDEs CONTENTS



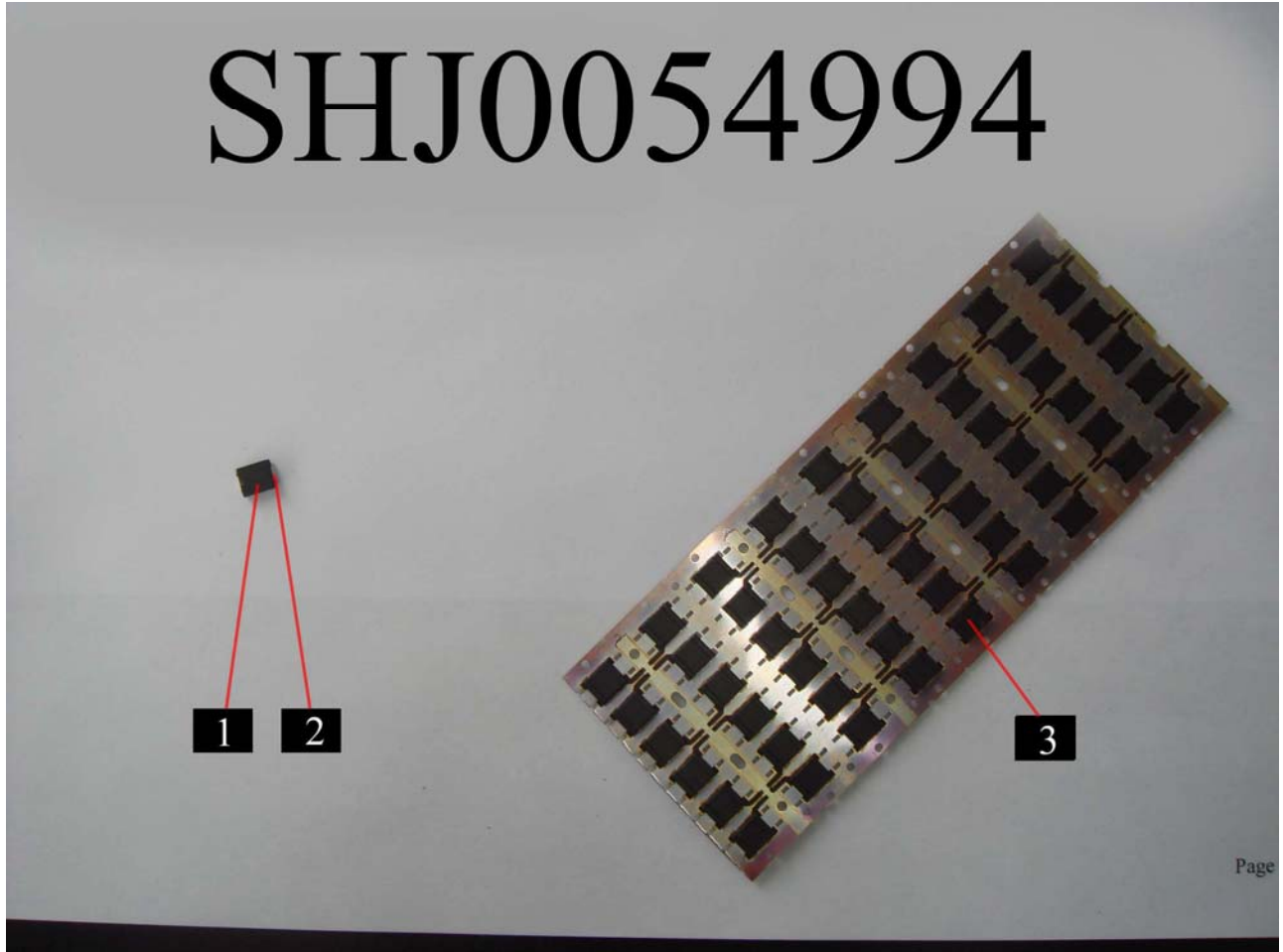
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END OF REPORT