

8/22/2006

Mr. Persang J Bavaadam
Persang Alloy Industries
Regd Off 13/A Shrinagar Society Rd-A
Akota
Baroda, Guj 20
India

Subject: Testing for Restricted Substances Compliance Solutions
File RS3574 Project 06CA37121

Dear Mr. Bavaadam,

The tests have been completed as anticipated under the Project Numbers 05CA54402 and 06CA36684. The Test Results, a Description of the Test Methods, and a Reported Limit Value Guidance Document are attached for your review.

Please review this information and determine if you would like to proceed with the addition of these results to one or more of the three UL RSCS Database views described in the table below.

UL Database View Option	Requires	Database Access	Database Includes
'My RSCS Data'	'My RSCS Data'	Product/Material Applicant Only (Password Protected)	Material / Product Model Number, Qualified RLV's, Manufacturer Declared RLV's, Progressing Data, Raw Test Data, Proprietary Information, Exemptions, & Surveillance Status
'RSCS Participant View'	'My RSCS Data'	Shared With All Participant View Applicants (Password Protected)	Material / Product Model Number, Qualified RLV's, Exemptions, & Surveillance Status
'iQ for Restricted Substances'	'My RSCS Data' & 'RSCS Participant View'	Public	Material / Product Model Number Eligible for UL RoHS Mark

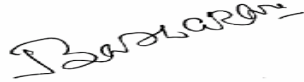
If you would like to proceed, we ask that you select Database View Options and Reported Limit Values (RLV's) for each material/substance/product model number and return them in writing to us.



We will review your proposal, and, if agreeable, complete the project. If any of your Database View Options or Reported Limit Values (RLV's) selections are not available, we will contact you for further discussion.

If you have any questions or comments, please contact me.

Sincerely,



Prabhakara Bantwal
Project Engineer
Department: 5302XEMR
Tel: +91-80-25204402
Fax: +91-80-25204407
E-mail: Prabhakara.Bantwal@in.ul.com

Reviewed by:



Richard Li
Senior Staff Engineer
Department: 5302XGNK
E-mail: Richard.L.Li@us.ul.com

Test Results

Sample	Test Method(s)	Concentration (ppm or mg/kg)					
		Lead	Cadmium	Mercury	Hexavalent Chromium	PBB	PBDE ¹
SP-604	E, G	<40	<5	<5	<5	NA	NA
SP-606	E, G	<40	<5	<5	<5	NA	NA
SP-610	E, G	<40	<5	<5	<5	NA	NA
Solder 9703000	E, G	42	<5	<5	<5	NA	NA
Solder 9653050	E, G	<40	<5	<5	<5	NA	NA
Solder 9930700	E, G	<40	<5	<5	<5	NA	NA

ppm = parts per million

Description Of Test Methods

- E. UL PROCEDURE (V1.2) FOR ELEMENTAL (Pb, Cd, Hg, Cr) ANALYSIS IN METAL AND METAL ALLOYS, TECHNIQUE #3, MICROWAVE METHOD BASED ON US EPA 3052 (SAMPLE DIGESTION BY HYDROCHLORIC AND NITRIC ACID) & ICP or AA SPECTROMETRIC DETECTION: An appropriate mass of sample (~0.5 g) is digested in a hydrochloric / nitric acid solution, under elevated temperature and pressure via microwave furnace assistance. After sample digestion, the measurement of elements of interest is performed by ICP or Flame AAS instrumentation.
- G. UL PROCEDURE (V1.1) FOR SOLUBLE HEXAVALENT CHROMIUM (Cr⁺⁶) ANALYSIS VIA ALKALINE DIGESTION & UV-VIS or IC COLOROMETRIC DETECTION BASED ON US EPA 3060A: An appropriate mass (typically 2 - 3 g) of cryogenically milled sample (whenever possible) undergoes an alkaline digestion to solubilize both water-insoluble and water soluble Cr(VI) compounds. Following careful pH control during the digestion, the Cr(VI) in the digestate undergoes reaction with diphenylcarbazide. The Cr(VI) content of the color complexed solution is then measured via VIS spectrophotometry or by ion chromatography (IC) with VIS detection.

¹ The European COMMISSION DECISION of 13 October 2005 amends Directive 2002/95/EC ("Restriction Of The Use Of Certain Hazardous Substances In Electrical And Electronic Equipment" or "RoHS") to add "DecaBDE in polymeric applications" to the list of exempt substances and applications as point 9a of the Annex ("Applications of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) which are exempted from the requirements of Article 4(1)"). Hereafter, Underwriters Laboratories Restricted Substance Compliance Solutions ("RSCS") database Reported Limit Values ("RLV's") for PBDE will not include measured amounts of DecaBDE in their calculation.

Reported Limit Value Guidance Document

The testing laboratory has returned concentration values for the requested substances. Before we can proceed with the project, we need for you to review this information, and determine if you would like to proceed with the addition of these results to the UL RSCS Database.

If you would like to proceed, we ask that you assign the Reported Limit Value ("RLV") to each material/substance. This is the level that will be reported in the RSCS Database, as well as the level used during RSCS Surveillance testing.

Criteria that you may want to consider in setting these levels include:

- Process variation in the manufacturing of the component or material
- Testing variation from the laboratories testing for restricted substances
- Knowledge of competitive listings
- Maximum allowable concentrations (currently established and proposed future)

After you have reviewed the above criteria, please select the RLV at or above the returned test concentrations for each material/substance based on the following allowable values. RLV's between the Method Detection Limit (MDL) and Reporting Limit (RL) are not available for selection. Any proposed values that do not conform to these criteria will not be added to the database.

For test result values less than 10 ppm: 1 ppm, 2 ppm, or 5 ppm levels are available (Example: Cadmium < 5 ppm)

For test result values \geq 10 ppm and less than 100 ppm: Increments of 5 ppm (Example: Cadmium < 20 ppm)

For test result values \geq 100 ppm but less than 1000 ppm: Increments of 50 ppm (Example: Cadmium < 150 ppm)

For test result values \geq 1000 ppm: Increments of 1000 ppm (Example: Cadmium < 2000 ppm)