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TEST REPORT

IMR Report Number 201810848

PO Number

5851

Date Received

September 19, 2018

Material

Gelatin

Specification(s)

EU Directive 2011/65/EU
(RoHS), maximum
concentration values (MCVs)
per EU 2015/863 amendment to
Annex II

SUMMARY

One sample was received for analysis of cadmium, lead, hexavalent chromium, mercury, bromine, and phthalates.

Based on the results, the samples **comply** with the MCV's for cadmium, lead, hexavalent chromium, PBBs, PBDEs, DEHP, BBP, DBP, DIBP and mercury as specified by the EU Commission in the amendment to the RoHS Directive.

The phthalate portion of the analysis was outsourced by IMR to a qualified outside facility (non-A2LA accredited).

The results are below.



Reviewed by

Mike St. Phillips
Staff Chemist

Reviewed by

Andrew Ensign, Manager
Chemistry Department

All procedures were performed in accordance with the IMR Quality Manual, current revision, and related procedures; and the PWA MCL Manual F 23 and related procedures. The information contained in this test report represents only the material tested and may not be reproduced, except in full, without the written approval of IMR Test Labs ("IMR"). IMR maintains a quality system in compliance with the ISO/IEC 17025 and is accredited by the American Association for Laboratory Accreditation (A2LA), certificates #1140.01 and #1140.02. IMR will perform all testing in good faith using the proper procedures, trained personnel, and equipment to accomplish the testing required. IMR's liability to the customer or any third party is limited at all times to the amount charged for the services provided. All samples will be retained for a minimum of 6 months and may be destroyed thereafter unless otherwise specified by the customer. The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal statutes. IMR Test Labs is a GEAE S-400 approved lab (Supplier Code T3983).

CHEMISTRY

Element	Sample	RoHS MCVs
Cd	<10	100 ppm
Pb	<10	1000 ppm
Cr ⁺⁶	<10	1000 ppm
Hg	<10	1000 ppm
Br	<50	1000 ppm**
DEHP	<100	1000 ppm
BBP	<100	1000 ppm
DBP	<100	1000 ppm
DIBP	<100	1000 ppm

**The limit is for PBBs and PBDEs.

Results in ppm (parts per million) unless otherwise indicated

Method(s): **Cd, and Pb:** CAP-017P (ICP-AES)
Cr⁺⁶ CAP-055E (UV-VIS)
Hg: CAP-054E Direct Mercury Analyzer (DMA)
Br: Modified ASTM D 4327-11 (IC)
Phthalates: GC/MS