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UL 746R

RESTRICTED USE SUBSTANCES IN POLYMERIC MATERIALS

Issue No. 3

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Summary of Topics

This Third Issue of the Outline of Investigation for Restricted Use Substances In Polymeric Materials is being issued to add four new restricted substances (bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP)) per the COMMISSION DELEGATED DIRECTIVE 2015/863 amending Annex II to Directive 2011/65/EU.

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INTRODUCTION

1 Scope

1.1 These requirements cover tests and evaluation for the assessment of polymeric materials with regard to the presence of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP) with respect to the maximum concentration levels specified in DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast) and the COMMISSION DELEGATED DIRECTIVE 2015/863 amending Annex II to Directive 2011/65/EU.

1.2 These requirements may be applied to other material types if found to be appropriate.

1.3 The final acceptance of materials certified to this outline of investigation is dependent upon its use in or as a complete product that complies with the requirements in the standard applicable to such a product.

1.4 This Outline does not investigate other properties of materials including flammability, toxicity or environmental risks.

2 Glossary

2.1 For the purpose of this standard, the terms and definitions in the multi-part IEC 62321 Edition 1.0 2013-06 series standards titled, "Determination of certain substances in electrotechnical products" apply. In addition, the following definitions also apply.

2.2 HOMOGENEOUS – Uniform in composition.

2.3 MATERIAL – A compound, part or substance that is discretely homogeneous throughout its entirety (e.g. a polyethylene compound) or discretely used as a uniform composite or layered material (e.g. co-extruded insulation) the compositional entities of which cannot be readily separated by mechanical means. These compounds, parts or substances are constructed such that:

- a) Homogeneous material pieces can be cut from any portion in any fashion such that they are representative of the whole and compositionally equal to pieces similarly cut from any other portion of the part/substance.
- b) Uniform composite or layered material pieces can be cut from any portion in a specific fashion (e.g. cross section) such that they are representative of the whole and compositionally equal to pieces similarly cut from any other portion of the part/substance.