



GLOBAL SUPPLIER ENVIRONMENTAL COMPLIANCE REQUIREMENTS



Revision Date: **31-Oct-2014**
Revision Level: **C**
DC: **132962**

Table of Contents:

1.0 Scope	2
2.0 Overview	2
3.0 RoHS Compliance	2
4.0 End of Life Vehicle Reporting	4

Kimball Electronics

Global Supplier Environmental Requirements

- 1.0 Scope** This document defines the Kimball Electronics (KE) Supplier Environmental Compliance Requirements for all commodities purchased globally by KE which are required, per purchase order agreement or schedule agreement, to comply with applicable environmental compliance requirements such as the Restriction of the Use of Certain Hazardous Substances (RoHS) Directive, 2002/95/EC and the End-of-life Vehicle (ELV) Directive, 2000/53/EC.
- 2.0 Overview** Kimball Electronics is committed to doing business with environmentally responsible suppliers and requires its suppliers to comply with all applicable laws, regulations, orders, and policies in providing materials and services to Kimball Electronics. As part of our supply chain strategy, this document has been developed to define our requirements for impacted suppliers.
- 3.0 ROHS Compliance** The Restriction of the Use of Certain Hazardous Substances (RoHS) Directive, 2002/95/EC of February 13, 2003, was enacted by the European Community to minimize the impact of end-of-life electrical and electronic equipment on the environment. The Directive bans the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic products sold in the European Union beginning July 1, 2006. **If a supplied commodity is required, per purchase order agreement or schedule agreement, to comply with the RoHS Directive, 2002/95/EC then the following requirements apply:**

3.1 Reference Documents (Most Recent Revision Applies)

2002/95/EC	Restriction of the Use of Certain Hazardous Substances (RoHS) Directive
IPC/JEDEC J-STD-020	Moisture/reflow Sensitivity Classification for Non-hermetic Solid State Surface Mount Devices (J-STD-020C)
IPC-1066	Marking, Symbols and Labels for Identification of Lead-free and Other Reportable Materials in Lead-free Assemblies, Components and Devices
IPC/JEDEC JESD97	Markings, Symbols, and Labels for Identification of Lead-Free Assemblies, Components, and Devices

3.2 Solderable Component Requirements

- 3.2.1 Solder profile** All solderable parts must reliably survive the lead-free reflow profile as presented in IPC J-Std-020 (rev C or greater).

Kimball Electronics

Global Supplier Environmental Requirements

3.2.2 Moisture sensitivity level. Components that are considered sensitive to moisture i.e. plastic encapsulated ICs and semiconductors, etc shall be capable of withstanding the soldering environment as defined herein. Unless otherwise agreed to by KE, verification of this requirement shall be performed per IPC J-STD-020 (rev C or greater) for lead-free components. A moisture sensitivity level of 3 or greater shall be achieved.

3.3 Documentation Requirements The supplier must be prepared to provide the following documentation for commodities requiring RoHS compliance:

3.3.1 ROHS Verification Form which is provided by KE and filled out by the supplier confirming parts comply with the RoHS Directive, 2002/95/EC and meet all required identifiability, solderability, traceability, reliability, and process compatibility requirements of KE.

3.3.1 Materials Declaration which states the level of banned substances present by percentage of weight in applicable homogeneous material and declares the presence of any other materials and substances requiring reporting per purchase order agreement. In lieu of customer specific reporting requirements, suppliers will be required to provide RoHS material declarations based on the Joint Industry Guide published by the Electronics Industry Alliance (EIA), European Industry Association (EICTA), and the Japan Green Procurement Survey Standardization Initiative (JGPSSI).

3.3.2 A Certificate of RoHS Compliance which is signed and clearly documents the validity period for the certificate and commodity shipments to KE. The format of Certificate will be communicated to the supplier. At KE's request, the supplier must provide objective evidence documenting the compliance status of the commodity and confirming there are no, non-exempt banned substances present.

3.4 Logistical Requirements. Component identification is crucial to demonstrating the compliance status of supplied commodities.

3.4.1 Unique Supplier Part Numbering is the identification method mandated by KE for RoHS compliant parts having undergone compliance-related conversion within two years of manufacture. This method clearly identifies the commodity as compliant and differentiates it from prior, noncompliant versions which may still be on the market.

Kimball Electronics

Global Supplier Environmental Requirements

- 3.4.2** All solderable commodities must be marked per IPC/JEDEC JESD97 and IPC-1066 with distinct symbols/labels to clearly indicate the Pb-Free nature of the commodity.

4.0 END OF LIFE VEHICLE REPORTING The End-of-Life Vehicle (ELV) Directive, 2000/53/EC of September 18, 2000, was enacted by the European Community to minimize the impact of End-of-Life vehicles on the environment. The Directive prohibits the use of lead, mercury, cadmium, and hexavalent chromium effective July 1, 2003, certain exemptions are listed in Annex II (2002/525/EC-27).

The ELV Directive also seeks to prevent waste from vehicles by ensuring reuse, recycling, and other appropriate recovery means. In response to this directive the automotive OEM must confirm the substance ban is being observed and must also know the composition of all parts and materials in the vehicle as well as the location in the vehicle of any parts and materials containing certain hazardous substances.

4.1 Reporting Requirements In response to the requirements of the ELV and other potentially forthcoming directives, automotive OEMs are mandating that suppliers report 100% of the material composition as well as recycled content for all parts and materials shipped to them and going into vehicles marketed globally.

The International Material Data System (IMDS) was adopted by the automotive OEMs to house the required data. To support the data collection process, the Automotive Industry Action Group (AIAG) developed a common set of rules and formats and implemented them with the Compliance Connect™ Excel workbook. This reporting tool can be obtained via the AIAG web site.

4.1.1 Kimball Electronics (**KE**) will contact affected suppliers to disclose required material and substance information using the Compliance Connect™ reporting tool following the instructions contained in the KE ELV Materials & Substances Reporting Specifications. **KE reserves the right to request the supplier to submit ELV data in other formats.**

4.1.2 Guidance on how to get the KE ELV Materials & Substances Reporting Specifications will be given when contact is made for disclosure.

4.1.3 If there is a change to the materials or substances in the supplier's product after initial submittal, the supplier shall resubmit a revised disclosure.

4.1.4 A SMCR is required for such changes.

Kimball Electronics

Global Supplier Environmental Requirements

Approved By
General Managers
Plant Engineering Managers
Supply Chain Management Manager
Systems Support Manager