



Environmentally Restricted or Sensitive Content Declaration


This declaration covers the following products (collectively “covered products”) manufactured by or on behalf of Cree, Inc. (“Cree”) and its subsidiaries at the locations listed below, and shipped by or on behalf of Cree on or after January 1, 2008:


Product Category/Type:	X-Lamp LED Packages
Production Location(s):	Cree, Inc., Durham, North Carolina USA
	Cree Huizho Opto, Ltd., Huizho Municipality, Guangdong Province, P.R. China
	ISO Technology Sdn. Bhd., Penang, Malaysia


Product Identification:	Part Number(s):
XR-E	Various
XR-C	Various
XR	Various
4550	Various (Blue, Green and White lamps only)
MC-E	Various
XP-E	Various

Cree hereby declares that the levels of environmentally sensitive materials, persistent biologically toxicants (PBTs), persistent organic pollutants (POPs), or otherwise restricted materials in the covered products are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances in the following international directives, regulations and/or guidelines, and as summarized in the attached Table 1:

- EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended through June 1, 2008 (now including Deca-BDE);
- PRC Ministry of Commerce regulations commonly referred to as "China RoHS" titled *Measures for Administration of the Pollution Control of Electronic Information Products* , initially in force on March 1, 2007, covering the reporting of the use of certain hazardous and restricted substances in electrical and electronic equipment, as amended through January 1, 2008;
- EU Directives 1907/2006 (REACH) and 76/769/EEC on restrictions on the marketing and use of certain dangerous or toxic substances and preparations, as amended through January 1, 2008;
- EU Directive 1999/45/EC relating to the classification, packaging and labelling of dangerous preparations, as amended through January 1, 2008;
- EU Directive 2037/2000 regarding Ozone depleting substances, as amended through January 1, 2008;
- Joint Industry Guide for Material Composition Declaration for Electronic Products (Joint Industry Guide or JIG) dated April 2005 developed by the Electronic Industries Alliance (EIA) and Japan Green Procurement Survey Standardization Initiative (JGPSSI) (in association with the European Information, Communications and Consumer Electronics Technology Industry Association (EICTA)) and standardized using JEDEC procedures (copy available at www.eia.org/jig)
- For locally regulated EU hazardous substances, CEFIC - EECA - EICTA (copy available at www.eicta.ntc.be/uploads/media/ChemicalsList-154448A.pdf) also provides a similar list of restricted substances to the aforementioned regulations. Cree, Inc. certifies that these added compounds are not intentionally added to our products, are not known to be part of the manufacturing process, and are not known to be formed under the conditions of manufacture for Cree products covered under this certification.

- 
 The covered products also satisfy the requirements of statute 2006 No. 1463, "The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronics Equipment Regulations 2006," effective July 1, 2006, which implements EU Directive 2002/95/EC (RoHS) in the United Kingdom (UK) for electrical and electronic equipment put on the market in the UK on or after July 1, 2006.

- 
 The covered products also satisfy the requirements of the Norwegian Pollution Control Authority regarding restricted content in products regulations, Chapters 1 through 7, which are finalized and scheduled for enactment sometime in mid-2008. These regulations include restrictions on the following materials commonly found in electronic products: bisphenol-A ("as freely available substance" following epoxy curing), PFOA's and PFOS's, arsenic, cadmium in coloring agents, short chained chlorinated paraffins and related chlorinated solvents, and vinyl chloride.

- 
 Cree, Inc. also certifies that vinyl chloride and polyvinyl chloride (PVC) are not incorporated into, or otherwise used in the manufacture of, the covered products in accordance with the restrictions noted by the Japanese "Standard on Food, Additives, and Related Products", local Japanese ordinances, or other developing standards of international significance.

In preparing this certificate, Cree has based its conclusions regarding the content of its Covered Products on certifications received from its suppliers, a review of its procurement and production processes, and the results of analytical tests for materials or substances used in homogeneous materials performed on the Covered Products by independent third parties. Cree has endeavored to be diligent and thorough.

This certification only applies to the products and specific materials or substances listed within this document. No additional certifications, expressions of risk or liability, or further declarations are made, expressed or implied. The recipient or end user of this data is responsible for determining the applicability of this data to its specific use or electrical or electronic equipment application. Other jurisdictions and governing bodies may enact or may have enacted additional restrictions and/or controls on these or other substances or materials, which restrictions and controls are outside the scope of this certification.

Due to the frequency of changes and the diversity in international laws regarding restricted and controlled substances, the certifications contained in this certificate are limited to compliance with the versions of the directives, guidelines and legislation referenced above. Unless and until Cree updates this certificate, the recipient or end user of this data should be aware that changes may occur or may have occurred in the directives, guidelines and legislation versions referenced above, and that this certification does not address the impact, if any, of such changes on the Covered Products.

Reviewed and approved for release by:

X 

Barry Rayfield
Cree International Compliance Coordinator

Telephone: 919-313-5373
Email: barry_rayfield@cree.com

X 

Randy Arnott
Cree EH&S Manager

Telephone 919-287-7542
Email: randy_arnott.cree.com



Table 1 - Environmentally Restricted Content Summary

Material/Substance	Regulation Restricting Use	CAS #	Covered Product Content	Units	Below Limit
Antimony/antimony compounds	JIG, PoHS	Various	not intentionally added or used	ppm	yes
Arsenic/arsenic compounds	RoHS, PoHS	Various	non-detect	ppm	yes
Asbestos	Various	Various	not intentionally added or used	fibers	n/a
AZO dyes	Various	Various	not intentionally added or used	ppm	yes
Beryllium/beryllium compounds	Various	Various	not intentionally added or used	ppm	yes
Bismuth/bismuth compounds	JIG	Various	not intentionally added or used	ppm	yes
Bisphenol A	PoHS	80-05-7	No residual detected where used	ppm	yes
Bromomethane	JIG	74-96-4	not intentionally added or used	ppm	n/a
Cadmium/cadmium compounds	RoHS, PoHS	Various	non-detect	ppm	yes
Chromium Compounds (hexavalent)	RoHS, JIG, PoHS	Various	non-detect	ppm	yes
Cobalt Compounds	JIG	Various	not intentionally added or used	ppm	n/a
Group 1 CFCs (ozone depleting)	Various	Various	not intentionally added or used	ppm	n/a
Chlorinated Paraffins (Hydrocarbons)	Various	Various	not intentionally added or used	ppm	n/a
Formaldehyde	German (packaging)	50-00-0	not intentionally added or used	ppm	n/a
Halons	Various	Various	non-detect	ppm	n/a
HCFCs	Various	Various	non-detect	ppm	yes
Group 2 HCFCs (ozone depleting)	Various	Various	non-detect	ppm	yes
HBFC	EU 3093/84/EEC	N/A	not intentionally added or used	ppm	n/a
Hexavalent chromium	RoHS	7440-47-3	non-detect	ppm	yes
Lead/lead compounds	RoHS	Various	non-detect	ppm	yes
Mercury/mercury compounds	RoHS	Various	non-detect	ppm	yes
Mirex	EU 76/69/EEC	2385-85-5	not intentionally added or used	ppm	n/a
Organo-tin compounds	JIG, PoHS	Various	not intentionally added or used	ppm	n/a
Polybrominated biphenyls (PBBs)	RoHS, PoHS	Various	non-detect	ppm	yes
Polybrominated diphenyl ethers (PBDEs)	RoHS, PoHS	Various	non-detect	ppm	yes
Polychlorinated biphenyls (PCBs)	PoHS	Various	non-detect	ppm	yes
PFCs, including PFOAs/PFOs	JIG (3/10/08 addition), PoHS	Various	non-detect	ppm	n/a
Certain Phthalates (including DEHP)	PoHS	Various	not intentionally added or used	ppm	n/a
Polyvinyl chloride (PVC)	JIG, PoHS	Various	not intentionally added or used	ppm	n/a
Radioactive Materials	Various	Various	not intentionally added or used	ppm	n/a
Selenium/selenium compounds	JIG	Various	not intentionally added or used	ppm	n/a
Tellurium/tellurium compounds	JIG	Various	not intentionally added or used	ppm	n/a
Thallium/thallium compounds	JIG	Various	not intentionally added or used	ppm	n/a
Tributyl tin compounds (including oxide)	JIG	Various	not intentionally added or used	ppm	n/a
Vinyl chloride	JIG, PoHS	75-01-4	not intentionally added or used	ppm	n/a

Notes for Table 1:

RoHS = EU RoHS regulations effective July 1, 2006, also PRC (China) RoHS regulations effective July 1, 2007
 PoHS = Norwegian product regulations effective January 1, 2008 or proposed amendments as noted
 JIG = Joint Industry Guide, including Japanese Green Procurement Initiative as outlined in JGPSSI/EICTA
 Non-detect = Analysis was performed, and this material was not detected
 Not intentionally added or used = This material is not knowingly incorporated into the covered product by Cree or our supplies

Table 2 - Product Content Summary

One or more of the following non-restricted substances are included in the covered products:

Substance/material	Use	Level
Silicon	Die substrate	%
Silicon Dioxide (glass)	Lens	%
Aluminum/aluminum compounds	Ceramic substrate	%
Copper	Contacts	%
Silver/silver compounds	Contacts	low %
Silicones	Heat transfer compounds	%
Gallium/gallium compounds	trace component	Trace
Gold/gold compounds	bonding wire and pads	low %
Platinum/platinum compounds	trace component	Trace
Nickel/nickel compounds	trace component	Trace*

Notes:

* Any nickel within the covered products will not result in skin exposure.