

EUROPEAN UNION ELV, WEEE & ROHS DIRECTIVE COMPLIANCE

Cadmium, Mercury, Hexavalent Chromium, Polybrominated Biphenyls & Diphenyl Ethers

With regard to European Union (EU) Directive 2000/53/EC on end of life vehicles (ELV) and Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS), to the best of National Semiconductor's knowledge and belief, National Semiconductor products do not contain cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBBs), and polybrominated diphenyl ethers (PBDEs) as either intentionally added ingredients or as unintended impurities in concentrations exceeding EU regulatory limits. National Semiconductor does not use these substances in production processes.

Lead

Most standard National Semiconductor products contain tin/lead solder. This use of lead is subject to ROHS Directive, Article 4(1) restrictions for most customer applications, but is considered exempt from ELV Directive, Article 4(2)(a) by Annex II (11). National Semiconductor products in certain plastic TO packages contain high temperature solder die attach material with >85% lead, which is considered exempt from ELV Directive, Article 4(2)(a) by Annex II (11) and ROHS Directive, Article 4(1) by Annex (7).

Most National Semiconductor products are currently available as leadfree. All products are scheduled to be available as leadfree in 2004. To the best of National Semiconductor's knowledge and belief, National Semiconductor leadfree products do not contain either intentionally added lead or lead as an unintended impurity in violation of the ELV and ROHS Directives. For information on National Semiconductor's leadfree program see <http://www.national.com/packaging/leadfree>.

Brominated Flame Retardants

With regard to EU Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), National Semiconductor products in plastic packages contain brominated epoxy resins as flame retardants and may be subject to WEEE, Article 6(1), Annex II (1). National Semiconductor is researching bromine-free mold compounds and expects to introduce them in 2005.

Supply Chain Management

National Semiconductor bans certain hazardous substances, including PBBs, PBDEs, cadmium, mercury, hexavalent chromium and lead (except in solder). National Semiconductor requires suppliers to certify that subcontractor manufactured final products, direct materials, and packing materials do not contain banned substances. Suppliers must provide ICP analytical data demonstrating that heavy metals are not present at concentrations exceeding EU regulatory limits.

National Semiconductor's *Banned Substances Certification; Product Stewardship Specifications; Environment, Health & Safety Policy*; and ISO 14001 Certificates are available upon request.