

Statement on European Union End of Life Vehicle (EU ELV)

The EU ELV 2000/53/EC directive released on 18 September 2000 restricted the use of 4 heavy metals, Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+) and Cadmium (Cd) in vehicles. The amending document 2002/525/EC released 27 January 2003 provided maximum concentration values of 1000ppm for Pb, Hg, Cr6+ and 100ppm for Cd. TI IC products listed by Texas Instruments (TI) as "Pb-free" or "Green" meet the ELV requirements without the use of any exemptions. TI products stated to be "RoHS Exempt" also would be ELV Exempt. For the small number of TI products that require an exemption for lead and lead compounds in components, they would use one of the following ELV exemptions per Commission Delegated Directive (EU) 2020/363 of 17 December 2019, amending Annex II to Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles.

- 8(e) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
- 8(g)(i) Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages.
Applies to vehicles type approved before 1 October 2022 and spare parts for these vehicles
- 8(g)(ii) Lead in solders to complete a viable electrical connection between the semiconductor die and the carrier within integrated circuit flip chip packages where that electrical connection consists of any of the following:
 - (i) a semiconductor technology node of 90 nm or larger;
 - (ii) a single die of 300 mm² or larger in any semiconductor technology node;
 - (iii) stacked die packages with dies of 300 mm² or larger, or silicon interposers of 300 mm² or larger.Applies to: Valid for vehicles type-approved from 1 October 2022 and spare parts for these vehicles
- 10(a) Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound.

Sincerely,



Randy Rath

TI SC Product Stewardship

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