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## EU RoHS Exemptions Expiring in July 2016 & Renewed in August 2018 / Feb 2019

The majority of Texas Instruments' (TI) IC components do not require RoHS exemptions. When TI IC components require an EU RoHS exemption, one of the following may apply:

Exemption	Description	Renewal Date	Directive Update
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	<ul style="list-style-type: none"><li>- 21 July 2021 Categories 1-7 and 10</li><li>- 21 July 2021 Categories 8 and 9</li><li>- 21 July 2023 Category 8 in vitro</li><li>- 21 July 2024 Categories 9 Industrial &amp; 11</li></ul>	(EU) 2018/739
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound	<ul style="list-style-type: none"><li>- July 21, 2021 for 1 to 7 and 10 &amp; 8 and 9 other than in vitro</li><li>- 21 July 2023 8 <i>in vitro</i></li><li>- 21 July 2024 9 industrial and 11</li></ul>	(EU) 2018/736
7(c) IV	Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors	<ul style="list-style-type: none"><li>- July 21, 2021 for All</li><li>- July 21, 2023 for 8 in Vitro</li><li>- July 21, 2024 for 9 Industrial and 11</li></ul>	
15 (a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: <ul style="list-style-type: none"><li>- A semiconductor technology node of 90 nm or larger;</li><li>- A single die of 300 mm<sup>2</sup> or larger in any semiconductor node;</li><li>- Stacked die packages with die of 300 mm<sup>2</sup> or larger, or silico interposers of 300 mm<sup>2</sup> or larger</li></ul>	<ul style="list-style-type: none"><li>- July 21, 2021 for 1 to 7 and 10</li></ul>	
15	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages	<ul style="list-style-type: none"><li>- July 21, 2021 for 8 and 9</li><li>- July 21, 2023 for 8 In Vitro</li><li>- July 21, 2024 for 9 Industrial and 11</li></ul>	

TI continues to support the need for these exemptions being extended and is working with electronic industry consortia as documents are being prepared for the next round of EU RoHS exemption extensions due Jan 2020.

Sincerely,

Mark Frimann  
TI SC Product Stewardship Management

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