

Comments on DECOS draft document on Tin and selected inorganic tin compounds. Evaluation of the effects on reproduction, recommendation for classification.

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PAGE NUMBER, LINE NUMBER	COMMENT
General Comments	<p>Given the many uses of tin and tin oxides, investigating the effects of tin exposure on reproductive health is warranted. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present. This report nicely details many studies investigating the reproductive effects of tin and tin oxide exposure. However, since one of the most likely means of exposure to tin and tin oxides is in an occupational setting, perhaps reviewing more studies mimicking occupational exposure scenarios would be beneficial. However, in conclusion., I do feel the committee’s recommendations are appropriate.</p>
Specific Comments	
Section 3; Page 20:	<p>Report states “People can be exposed to organic, inorganic and elemental tin through food, drinking water, consumer products and environmental media (air, soil and dust). However, most of the tin exposure in the general population is in the form of inorganic tin from the consumption of canned food and beverages.”</p> <p>These sentences are a bit repetitive. It is stated that most commonly people are exposed to tin through food and water. Then the next sentence states canned food is how the general population is mostly exposed. Just a simple rewording of the two sentences would cut out the repetitiveness.</p>

<p>Section 4.2; Page 22:</p>	<p>Report states “In humans with no occupational exposure to tin compounds, blood tin concentrations of 2–9 µg/L are reported. Others reported average tin concentrations in the general population of 11.6 ± 4.4 nmol/L (= 0.0014 mg/L) in plasma and 21.7 ± 6.7 nmol/L (=0.0026 mg/L) in red blood cells in 12 humans (8 women, 4 men, mean age 77.8 years).”</p> <p>Since this report is written for the public, it may be beneficial to change the units of measurement to a congruent metric. Specifically, the report lists the first measurement in ug/L and then goes on to convert other measurements to mg/L. For the sake of simplicity (and less confusion), perhaps convert the mg/L to ug/L or the ug/L to mg/L. Either way, using the same metric for comparison would be beneficial as the general population reviews this report.</p>
<p>Section 5; Page 29:</p>	<p>The title of this section is “Adverse effects on sexual function and fertility.”</p> <p>The title may need revision/clarification as it is not apparent that the section in any way investigates adverse effects of sexual function. Upon review of the definition of sexual function, Section 5 does not seem to investigate sexual function but instead fertility.</p>
<p>Page 41; Line 24:</p>	<p>Report states “The effect of nanoparticles of tin, silver, copper, zinc oxide and cadmium oxide on sexual hormones was investigated in rats (6 animals/group).”</p> <p>The report then proceeds to only give the results for the tin nanoparticle outcome and does not mention the other nanoparticles that were investigated. Due to the fact this report focuses on tin, perhaps the sentence should be revised so that the names of the other nanoparticles are removed. The sentence leads the reader to believe that there may be information about other nanoparticles when the only nanoparticle being reviewed is tin.</p>

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