Vettori et al, 2006

Guidelines/Criteria	
Reference:	Vettori MV, Goldoni M, Caglieri A, Poli D, Folesani G, Ceccatelli S, Mutti A. 2006. Antagonistic effects of methyl-mercury and PCB 153 on PC12 cells after a combined and simultaneous exposure. Food Chem Toxicol 44:1505-1512.
In vitro **Study Type** Route of Administration Species & age of animals	PC12 cytotoxicity assay
Study Duration	24hrs
Type of Mixture Binary >2 components Similar acting or dissimilar What Mode of Action was investigated?	 Yes No Dissimilar Just cytotoxicity
Parameters/End points Measured Target organs/Critical effects Pharmacological changes or adverse effects *In vitro*	 Cell viability using MTT
Individual Components Characterisation of individual compounds Name, exact chemical name, CAS no. Were dose responses established for individual components? Were no effect levels established? Were doses below the NO(A)ELs investigated?	 Methyl-mercury and PCB153 Yes Yes, 10e-7 M for methyl-mercury and 10e-4 M for PCB153 Yes for PCB153 only
Mixtures Investigated Number of dose levels How does the mixture make-up compare to individual components? (e.g. low dose) equivalents used?) No. of technical replicates per exposure condition (*in vitro*) No. of animals per dose group (*in vivo*)	 Many, but only 2 were at the NOELs of each component No particular rationale. The two relevant mixtures tested contained 1x the NOEL of methyl-mercury, and 0.5x & 1x the NOEL of PCB153 8 reps in each experiment, and each experiment was repeated
Observations/Findings	No effects seen for any treatments where each component was at a NOEL.
Overall opinion (e.g. sufficient numbers of groups investigated, group sizes adequate, observations reproducible, low dose levels used investigated)	Seems well conducted.