

APPENDIX 1

SUMMARY TABLE OF GENETIC AND RELATED EFFECTS

Appendix 1. Summary table of genetic and related effects

Nonmammalian systems								Mammalian systems																																
Prokaryotes		Lower eukaryotes		Plants		Insects		<i>In vitro</i>								<i>In vivo</i>																								
				Animal cells				Human cells				Animals				Humans																								
D	G	D	R	G	A	D	G	C	R	G	C	A	D	G	S	M	C	A	T	I	D	G	S	M	C	A	T	I	D	G	S	M	C	DL	A	D	S	M	C	A
Petroleum solvents																																								
Rubber solvent																																								
Another special boiling range solvent																																								
White spirits																																								
Toluene																																								
Xylene																																								
Cyclohexanone																																								
Dimethylformamide																																								
Morpholine																																								
1,2-Epoxybutane																																								
Bis(2,3-epoxycyclopentyl)ether																																								
Glycidyl ethers																																								
Alkyl (C ₆ -C ₁₄) glycidyl ethers																																								
Allyl glycidyl ether																																								

Nonmammalian systems										Mammalian systems																														
Prokaryotes		Lower eukaryotes			Plants		Insects			<i>In vitro</i>					<i>In vivo</i>																									
					Animal cells					Human cells					Animals			Humans																						
D	G	D	R	G	A	D	G	C	R	G	C	A	D	G	S	M	C	A	T	I	D	G	S	M	C	A	T	I	D	G	S	M	C	DL	A	D	S	M	C	A
Bisphenol A diglycidyl ether																																								
+																																								
Butane diol glycidyl ether																																								
+ ¹																																								
Butyl glycidyl ether (n = n-butyl; t = tert-butyl; x, positive <i>via</i> intraperitoneal route, negative <i>via</i> oral route)																																								
+ n,t																																								
- _{1n}																																								
x ⁿ + 1n																																								
?																																								
tert-Butyl phenyl glycidyl ether																																								
+																																								
Cresyl glycidyl ether																																								
+																																								
Neopentyl glycol diglycidyl ether																																								
+ ¹																																								
Phenol																																								
-																																								
?																																								
-																																								
- ¹																																								
+ ¹																																								
-																																								
+																																								
+																																								
Antimony trioxide																																								
+ ¹																																								
Titanium dioxide																																								
-																																								

A, aneuploidy; C, chromosomal aberrations; D, DNA damage; DL, dominant lethal mutation; G, gene mutation; I, inhibition of intercellular communication; M, micronuclei; R, mitotic recombination and gene conversion; S, sister chromatid exchange; T, cell transformation

In completing the tables, the following symbols indicate the consensus of the Working Group with regard to the results for each endpoint:

- + considered to be positive for the specific endpoint and level of biological complexity
- +¹ considered to be positive, but only one valid study was available to the Working Group.
- considered to be negative
- ¹ considered to be negative, but only one valid study was available to the Working Group
- ? considered to be equivocal or inconclusive (e.g., there were contradictory results from different laboratories; there were confounding exposures; the results were equivocal)