APPENDIX 1

SUMMARY TABLE OF GENETIC AND RELATED EFFECTS
## Appendix 1. Summary table of genetic and related effects

<table>
<thead>
<tr>
<th>Nonmammalian systems</th>
<th>Mammalian systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prokaryotes</strong></td>
<td><strong>In vivo</strong></td>
</tr>
<tr>
<td><strong>Lower eukaryotes</strong></td>
<td><strong>In vivo</strong></td>
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<tr>
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</tr>
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<td><strong>Animals</strong></td>
<td><strong>Humans</strong></td>
</tr>
</tbody>
</table>

### 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 (C₃₋C₆) glycidyl ethers**
- **Allyl glycidyl ether**
- **-**
- **+**
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| 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 | D | S | M | C | A |

- Bisphenol A diglycidyl ether
  +

- Butane diol glycidyl ether
  +

- Butyl glycidyl ether ($n = n$-butyl; $t =$ tert-butyl; $x$: positive via intraperitoneal route, negative via oral route)
  + $\times$\

- tert-Butyl phenyl glycidyl ether
  +

- Cresyl glycidyl ether
  +

- Neopentyl glycol diglycidyl ether
  +

- Phenol
  -

- Antimony trioxide
  +

- 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

+ considered to be positive, but only one valid study was available to the Working Group

- considered to be negative

- 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)