

## STUDY OUTLINE

### IN VITRO MAMMALIAN CHROMOSOME ABERRATION TEST

OECD No. 473

*Test system:* : Chinese hamster lung male cells (V79) or  
Chinese hamster ovary cells (CHO-K1)

#### **Pre-test on Toxicity (Concentration selection)**

*Treatment/sampling time* : 3/20 h treatment/sampling time  $\pm$  S9  
: 20/20 h treatment/sampling time –S9  
20/28 h treatment/sampling time –S9  
3/28 h treatment/sampling time + S9

*Toxicity determination:* By cell counting and results will be noted as cell survival in the treatment group (in %) in relation to the negative solvent control.

*Selected concentration of main test:* On the basis of solubility or toxicity (the highest is not more than 50% compared to the negative (solvent) control.  
The max concentration 5 mg/ml or 10 mM, whichever is the lowest

#### **Main Experiment**

##### **Experiment A**

*Treatment/sampling time* : 3/20 h treatment/sampling time  $\pm$  S9  
: 20/20 h treatment/sampling time –S9  
*Dose* : 5-8 test item concentrations 3 or more selected for scoring

*Positive controls* Ethylmethane sulphonate (–S9)  
Cyclophosphamide sulphonate (+S9)

*Negative control* Solvent of test item

##### **Experiment B**

*Treatment/sampling time* : 20/20 h treatment/sampling time –S9  
20/28 h treatment/sampling time –S9  
3/28 h treatment/sampling time + S9

*Positive controls* Ethylmethane sulphonate (–S9)  
Cyclophosphamide sulphonate (+S9)

*Number of replicates* : Two replicate cultures (at each exp. Point)

*Data analysed* : 200 metaphase/concentration