

**Results of Testing**

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Phenol	108-95-2	HEATOX Respiratory toxicity	Non-TSCA Protocol/ Guideline (docket OPPTS-42150B)	F344 rat	inhalation, 6 h/d, 5 d/wk 14 days, 2 wk recovery	0, 0.5, 5, 25 ppm	10/sex	Clinical pathology measurements, organ weights, gross and microscopic pathology examinations made at the end of the exposure period and after the 2-week recovery period did not indicate treatment-related effects. Microscopic evaluations conducted on the liver, kidney and respiratory tract of rats in the control and high-exposure groups at termination and recovery did not show lesions related to phenol exposure. Thus the NOEL for this study was greater than 25 ppm. [EPA]	63 FR 10620, 3/4/98 Docket OPPTS-44646
Phenol	108-95-2	HENEUR Motor activity, subchronic	NTIS 91-154617	Sprague- Dawley rats	drinking water	200, 1000 and 5000 ppm	15 male and 15 female	Administration of phenol in the drinking water to Sprague-Dawley rats at a concentration of 5000 ppm produced signs of systemic toxicity including reduced body weight gain, reduced food and water consumption and abnormal clinical signs including dehydrated appearance. At 1000 ppm, decreased water intake and on occasion dehydrated appearance were seen. The females in both dosed groups were more severely affected than males. FOB evaluations did not reveal any findings of toxicologic significance and no gross or histopathologic lesions in nervous tissue were treatment-related. There were significant reductions in motor activity of females in the 1000 and 5000 ppm groups, but not males. Since the rats showed signs of systemic toxicity in both dose groups, the altered motor activity may be due to the reduced body weight gain and/or reduced food/water consumption and not a direct neurotoxic effect. The NOAEL for toxic effects was 200 ppm (18.1 and 24.6 mg/kg/day for males and females, respectively).	63 FR 67067, 12/4/98 Docket OPPTS-44650

**G100**  
**IRIS Chemicals**

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Phenol	108-95-2	HENEUR Neuropathology, subchronic	NTIS 91-154617	Sprague- Dawley rats	drinking water	200, 1000 and 5000 ppm	15 male and 15 female	Administration of phenol in the drinking water to Sprague-Dawley rats at a concentration of 5000 ppm produced signs of systemic toxicity including reduced body weight gain, reduced food and water consumption and abnormal clinical signs including dehydrated appearance. At 1000 ppm, decreased water intake and on occasion dehydrated appearance were seen. The females in both dosed groups were more severely affected than males. FOB evaluations did not reveal any findings of toxicologic significance and no gross or histopathologic lesions in nervous tissue were treatment-related. There were significant reductions in motor activity of females in the 1000 and 5000 ppm groups, but not males. Since the rats showed signs of systemic toxicity in both dose groups, the altered motor activity may be due to the reduced body weight gain and/or reduced food/water consumption and not a direct neurotoxic effect. The NOAEL for toxic effects was 200 ppm (18.1 and 24.6 mg/kg/day for males and females, respectively).	63 FR 67067, 12/4/98 Docket OPPTS-44650
Phenol	108-95-2	HENEUR Functional observa- tional battery, sub- chronic	NTIS 91-154617	Sprague- Dawley rats	drinking water	200, 1000 and 5000 ppm	15 male and 15 female	Administration of phenol in the drinking water to Sprague-Dawley rats at a concentration of 5000 ppm produced signs of systemic toxicity including reduced body weight gain, reduced food and water consumption and abnormal clinical signs including dehydrated appearance. At 1000 ppm, decreased water intake and on occasion dehydrated appearance were seen. The females in both dosed groups were more severely affected than males. FOB evaluations did not reveal any findings of toxicologic significance and no gross or histopathologic lesions in nervous tissue were treatment-related. There were significant reductions in motor activity of females in the 1000 and 5000 ppm groups, but not males. Since the rats showed signs of systemic toxicity in both dose groups, the altered motor activity may be due to the reduced body weight gain and/or reduced food/water consumption and not a direct neurotoxic effect. The NOAEL for toxic effects was 200 ppm (18.1 and 24.6 mg/kg/day for males and females, respectively).	63 FR 67067, 12/4/98 Docket OPPTS-44650

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Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Phenol	108-95-2	HERTOXTERE Reproductive toxicity	40 CFR 798.4700	Sprague- Dawley rats	drinking water	200, 1000, and 5000 ppm	30 male, 30 female	There was no evidence of immunotoxicity. An increase in blood urea nitrogen was observed in the 5000 ppm group. Significant decrease in water consumption, and to a lesser extent food consumption were noted in the 5000 ppm group in both male and female of P1 and F1 generations. The decrease in water consumption was related to flavor aversion. Significant reductions in the absolute body weight and body weight gain of P1 and F1 males and females were also observed during the exposure period. Litter survival and offspring body weight in both F1 and F2 generations of the 5000 ppm.group were significantly reduced. For survival, this effect was more pronounced in the F2 generation. Mating performance and fertility in both generations were similar in treated and untreated groups. Absolute prostate weight was significantly reduced at all concentrations in the F1 generation, but the decrease in relative prostate to body weight was statistically significant only at the 1000 ppm mid-dose group. Vaginal cytology/cyclicality and male reproductive functions (epididymal/testicular sperm counts, motility, and morphology) were unaffected by treatment in both P1 and F1 rats. However, reduced testis weight was observed in F1 males from the 5000 ppm group. Dose-related decreases in the weight of ovaries were observed in P1 females and uterus weights in both P1 and F1 generations. The absolute and relative uterus weight in the F1 generation was significantly lower than in the control group at all phenol dose levels, i.e. >200 ppm. No adverse treatment related histological changes were observed in the testes, ovaries, uterus, prostate or any other tissue analyzed. The no-observed-adverse-effect (NOAEL) for reproductive toxicity of phenol in drinking water was defined as 1000 ppm, based on decreased pup survival and pup body weight in both F1 and F2 generations at the 5000 concentration. The daily intake of phenol in adult rats at 1000 ppm was estimated to be about 70 mg/kg for males, and about 93 mg/kg for females.	64 FR 41934, 8/2/99