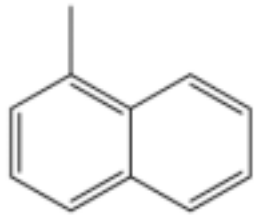


Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test(OECD TG422) -Data Sheet-

MITI No.		4-80	CAS No.	90-12-0
Test substance	Chemical name	: 1-Methylnaphthalene		
	Synonym	: Naphthalene, 1-methyl-		
	Molecular weight	: 142.20		
	Molecular formula	: C ₁₁ H ₁₀		
	Structural formula	:		
				
Appearance	Almost colorless and transparent liquid			
Solubility	Insoluble in water (25.8 mg/L), Soluble in alcohol, benzene and ether			
Biodegradation	Non-biodegradable (Official Bulletin of Economy, Trade and Industry dated November 15, 2004)			
Bioconcentration	Low bioconcentration (Official Bulletin of Economy, Trade and Industry dated December 22, 2005)			
Purity	97.2%			
Range finding study	Dose level	0, 10, 100, 500, 1,000 mg/kg/day		
	Dosing period	14 days		
	Results	1,000: Death (M 3/3, F 1/3) 500: RBC ↓ (tendency), Hgb ↓ (tendency), Hct ↓ (tendency), T-Chol ↑ (M, F), AST ↑, ALT ↑ (M), Liver A/R ↑ (F) 100: Adrenal A/R ↑ (F)		
Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test(OECD TG422)				
Experimental Method	Test animals	CrI:CD (SD) male and female rats, 9 weeks old (initiation of dosing)		
	Administration	Oral gavage Vehicle: Olive oil		
	Dose level	0, 10, 50, 250 mg/kg/day, Recovery 0, 250 mg/kg/day (R250)		
	Dosing period	M: 42days F: 41 - 45 days (from 14 days before mating to day 4 of lactation)		
Results of Repeated dose toxicity	Clinical signs	NE		
	FOB	NE		
	Body weight	NE		
	Food consumption	NE		

	Urinalysis	NE
	Hematology	NE
	Blood chemistry	NE
	Organ weight	M: Liver A,R ↑ (250) F: Liver R ↑ (250, R250)
	Histopathology	NE
	Target organ	Liver
Results of Reproduction and developmental toxicity	Parent	NE
	Offspring	NE
NOAEL		Repeated dose toxicity: M 250, F 250 Reproductive and developmental toxicity: 250*
	Basis for NOAEL	Repeated dose toxicity: No adverse effect Reproductive and developmental toxicity: No adverse effect*
NOEL		Repeated dose toxicity: M 50, F 50 Reproductive and developmental toxicity: 250*
	Basis for NOEL	Repeated dose toxicity: M 250: Liver A,R ↑ F 250: Liver R ↑ Reproductive and developmental toxicity: No effect*
Note	*: Total litter loss was observed in one female of the 250 mg/kg/day group, 2 females on the 10 mg/kg/day group and one female of the control group. Therefore, it is difficult to evaluate the reproductive toxicity of the compound because of the equivocal data.	

↑; increase, ↓; decrease

M; male, F; female

A; absolute organ weight, R; relative organ weight

The data was reviewed by Hazard-Data Evaluation Committee of National Institute of Technology and Evaluation in fiscal 2009.