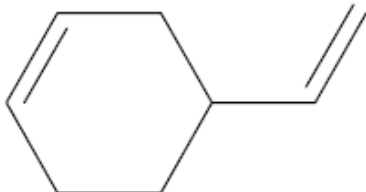


Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test(OECD TG422) -Data Sheet-

MITI No.	3-2229		CAS No.	100-40-3	
Test substance	Chemical name	: 4-Vinyl-1-cyclohexene			
	Synonym	:			
	Molecular weight	: 108.18			
	Molecular formula	: C ₈ H ₁₂			
	Structural formula	:			
					
Appearance	Colorless liquid				
Solubility	in water: 284 mg/L (25 degC)				
Biodegradation	Non-biodegradable				
Bioconcentration	Low bioconcentration				
Purity	99.8%				
Range finding study	Dose level	0, 25, 250, 500, 1,000 mg/kg/day			
	Dosing period	14 days			
	Results	1,000: Killed in extremis (all animals), Salivation (M, F), Decrease in locomotor activity (M, F), Respiratory rate ↓ (M, F), Rale (M, F), Dyspnea (F), Reddish tear (M, F), Lateral position (M), Hunchback position (M), Crouching position (M), Irritability (M), Tremor (M), Tip toe gait (M), Dragging of hindlimbs (M, F), Ataxic gait (F), Enlargement of the liver (M, F), Recessed area of mucosa in the glandular stomach (M), Perforation and recessed area of mucosa in the duodenum (M) 500: Salivation (M, F), Decrease in locomotor activity (M, F), Respiratory rate ↓ (M, F), Attachment of black substance to mucosa of the glandular stomach (M), Liver A, R ↑ (F), Enlargement of the liver (F) 250: Salivation (M, F), Decrease in locomotor activity (M), Respiratory rate ↓ (M)			
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, 2, 20, 200 mg/kg/day, Recovery 0, 200 mg/kg/day (R200)			
	Dosing period	M: 42days F: 41 - 48 days (from 14 days before mating to day 4 of lactation)			
Results of Repeated dose toxicity	Clinical signs	M: Salivation (2, 20, 200), Decrease in locomotor activity (200) F: Salivation (200), Loose stool (200), Soiled perianal region (200)			
	FOB	NE			
	Body weight	NE			

	Food consumption	NE
	Urinalysis	-
	Hematology	F: RBC ↓ (R200)
	Blood chemistry	NE
	Organ weight	M: Kidney R ↑ (200)
	Histopathology	M: Recessed region in mucosa of the glandular stomach (200), Apparent spotty pattern of surface of the kidney (200), Increased eosinophilic bodies in the kidney (20, 200), Increased hyaline droplets in the kidney (200) F: Recessed region in mucosa of the forestomach (200), Blackish region in mucosa of the glandular stomach (200), Diffuse hyperplasia of squamous epithelium and ulcers in the forestomach (200), Myocardial degeneration and necrosis in the heart (200)
	Target organ	Stomach
Results of Reproduction and developmental toxicity	Parent	NE
	Offspring	NE
NOAEL		Repeated dose toxicity: M 20, F 20 Reproductive and developmental toxicity: 200
	Basis for NOAEL	Repeated dose toxicity: M 200: Decrease in locomotor activity F 200: Recessed region in mucosa of the forestomach, Blackish region in mucosa of the glandular stomach, Diffuse hyperplasia of squamous epithelium and ulcers in the forestomach Reproductive and developmental toxicity: No adverse effect
NOEL		Repeated dose toxicity: M less than 2, F 20 Reproductive and developmental toxicity: 200
	Basis for NOEL	Repeated dose toxicity: M 2: Salivation F 200: Salivation, Recessed region in mucosa of the forestomach, Blackish region in mucosa of the glandular stomach, Diffuse hyperplasia of squamous epithelium and ulcers in the forestomach Reproductive and developmental toxicity: No effect
Note		

↑; 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 2008.