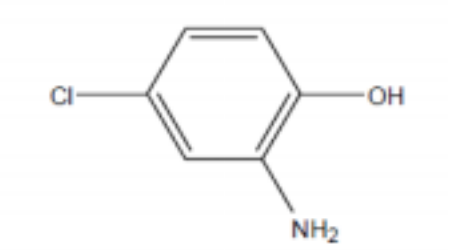
Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test(OECD TG422) -Data Sheet-

MITI No.	3-906		CAS No.	95-85-2
Test substance	Chemical name Synonym Molecular weight Molecular formula Structural formula	: 2-amino-4-chlorophenol : 2-Hydroxy-5-chloroaniline 5-Chloro-2-hydroxyaniline p-Chloro-o-aminophenol : 143.57 : C_6H_6ClNO : 		
Appearance	Light brown – light orange crystalline powder			
Solubility	2302 mg/L (25 degC, in water, Calculated value by WSKOW)			
Biodegradation	No data is available in the existing chemicals survey program. (as of 2008), Not readily biodegradable (0.0983, Calculated value by Biowin6)			
Bioconcentration	No data is available in the existing chemicals survey program. (as of 2008), BCF=4.94 (Calculated value by BCFWIN)			
Purity	99.0%			
Range finding study	Dose level	0, 10, 50 250 mg/kg/day		
	Dosing period	14 days		
	Results	250: Enlargement of the spleen (M,F), Spleen weight ↑ (M,F), RBC ↓ (M,F), Hct ↓ (M,F), MCHC ↓ (M,F), RET ↑ (M,F), Hgb ↓ (M), MCV ↑ (F), MCH ↑ (F), Liver weight ↑ (F)		
Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test(OECD TG422)				
Experimental Method	Test animals	Crl:CD (SD) male and female rats, 9 weeks old (initiation of dosing)		
	Administration	Oral gavage Vehicle: 0.5 w/v%CMC-Na solution containing 0.1 w/v%Tween 80		
	Dose level	0, 10, 50, 250 mg/kg/day, Recovery 0, 250 mg/kg/day (R250)		
	Dosing period	M: 42days F: 42 - 54 days (from 14 days before mating to day 4 of lactation)		
Results of Repeated dose toxicity	Clinical signs	F: Death (250 (1/11, GD 22), R250 (2/5, Day 1)), Anemia (250), Decrease in locomotor activity (250), Prone position (250)		
	FOB	NE		
	Body weight	NE		
	Food consumption	NE		
	Urinalysis	NE		

	Hematology	M: RBC ↓ (250, 50 tendency), Hgb ↓ (250), MCHC ↓ (250, R250), RET ↑ (250, 50 tendency), Hct ↓ (250) F: RBC ↓ (250, 50), Hgb ↓ (250), MCHC ↓ (250, 50), RET ↑ (250), MCV ↑ (250, 50, R250), MCH ↑ (250, 50, R250)
	Blood chemistry	M: NE F: T-Bil ↑ (250)
	Organ weight	M: Spleen A,R ↑ (250), Liver R ↑ (250) F: Spleen A,R ↑ (250)
	Histopathology	M: Enlarged spleen (250), Extramedullary hematopoiesis in the spleen ↑ (250), Hemosiderin pigmentation in the spleen ↑ (250, R250), Hematopoietic cell in the femur bone marrow ↑ (250), Hyperplasia of squamous cell in the limiting ridge of the forestomach (250, R250), Hyperplasia of epithelium in foveola in the glandular stomach (250), Globule leukocyte in the glandular stomach mucosa ↑ (250), Inflammatory cell infiltration in the gastric submucosa (250) F: Enlarged spleen (250), Extramedullary hematopoiesis in the spleen ↑ (250), Hemosiderin pigmentation in the spleen ↑ (250, R250)
	Target organ	Erythroid series, Stomach
Results of Reproduction and developmental toxicity	Parent	NE
	Offspring	NE
NOAEL		Repeated dose toxicity: M 50, F 50 Reproductive and developmental toxicity: 250
	Basis for NOAEL	Repeated dose toxicity: M 250: Anemic changes, Enlargement, weight ↑, increase in extramedullary hematopoiesisand hemosiderin pigmentation ↑ in the spleen, Increased hematopoiesis in the bone marrow, Hyperplasia of squamous cell in the limiting ridge of the forestomach, Hyperplasia of epithelium in foveola in the glandular stomach, Globule leukocyte in the glandular stomach mucosa ↑, Inflammatory cell infiltration in the gastric submucosa F 250: Anemic changes, Enlargement, weight ↑, increase in extramedullary hematopoiesisand hemosiderin pigmentation ↑ in the spleen, Increased hematopoiesis in the bone marrow, Death Reproductive and developmental toxicity: No adverse effect
NOEL		Repeated dose toxicity: M 10, F 10 Reproductive and developmental toxicity: 250
	Basis for NOEL	Repeated dose toxicity: M 50: Anemic changes F 50: Anemic changes 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.