4-Nitrobenzoyl chloride (4-ニトロベンゾイル=クロリド)

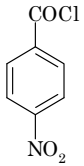
Experimental Data (Short treatments)

Chemical Name ; 4-Nitrobenzoyl chloride

Synoym ; *p*-Nitrobenzoyl chloride

Molecular Weight ; 185.57
Melting Point ; 75℃ [CHCD]
Boiling Point ; 205℃(105 mmHg)[CHCD]
Flashing Point ; −
Molecular Formula ; $C_7H_4ClNO_3$

Chemical Structure ;



CAS No. ; 122-04-3
METI No. ; (3)-1504
MHLW No. ; −
Specified Chemical Substances ; −

Source of Substance; Wako Pure Chemical Industries, Ltd.
Lot No. ; ELR2446
Purity ; 99.3%

Vehicle ; Dehydrated acetone

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
			No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
				ctb	cte	csb	cse								
6-18	−	[Acetone] (0.5%)	200	0	0	0	0	0	0	0	100	200	0	0	0
		0.24†	200	0.5	1	0	0	0	1.5	0	96	202	1	0	1
		0.48†	200	0	0.5	0	0	0	0.5	0	72	202	1	0	1
		0.95†	200	0	0.5	0	0	0	0.5	0	59	203	1.5	0	1.5
		1.9†	200	0	0	0	0	0	0	0	41	202	1	0	1
		[MMC] (0.00012)	200	13	73.5	0	0	0	76.5	2	−	202	1	0	1
6-18	+	[Acetone] (0.5%)	200	0	0	0	0	0	0	0.5	100	200	0	0	0
		0.24†	200	0	0	0	0	0	0	0.5	91	202	1	0	1
		0.48†	200	0	0	0	0	0	0	0	82	200	0	0	0
		0.95†	200	0.5	0	0	0	0	0.5	0	58	201	0.5	0	0.5
		1.9†	200	0	0.5	0	0	0	0.5	0	47	201	0.5	0	0.5
		[B[a]P] (0.01)	200	4.5	22	0	0	0	25.5	0.5	−	200	0	0	0

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h

† The precipitation of test chemical was observed in the culture medium.

Judgement for
Chromosomal Aberration in CHL/IU ; Negative

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation (Continuous treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
		No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
			ctb	cte	csb	cse								
24-0	[Acetone] (0.5%)	200	0	0	0	0	0	0	0	100	200	0	0	0
	0.24†	200	0	0.5	0	0	0	0.5	0	62	202	1	0	1
	0.48†	200	1.5	0	0	0	0	1.5	0	46	201	0.5	0	0.5
	0.95†	200	1	0	0	0	0	1	0	35	201	0.5	0	0.5
	1.4†	200	0	0.5	0	0	0	0.5	0	36	201	0.5	0	0.5
	1.9†	164	0.6	0.6	0	0	0	1.2	1.2	31	165	0.6	0	0.6
	[MMC] (0.00004)	200	4.5	52	0	0	0	53	0.5	—	200	0	0	0
48-0	[Acetone] (0.5%)	200	0	0	0	0	0	0	0	100	200	0	0	0
	0.12†	200	0.5	0	0	0	0	0.5	0.5	88	200	0	0	0
	0.24†	200	0	0	0	0	0	0	0	55	200	0	0	0
	0.48†	200	0.5	0	0	0	0	0.5	0.5	25	201	0.5	0	0.5
	0.71†	200	0	0.5	0	0	0	0.5	0.5	28	202	1	0	1
	0.95†	152	0	0.7	0	0	0	0.7	0.7	14	153	0.7	0	0.7
	[MMC] (0.00004)	200	0	81	0	0	0	83	0.5	—	200	0	0	0

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h

† The precipitation of test chemical was observed in the culture medium.