

[アクリロリド]

Chemical Name; Allyl chloride
 Synonym ; 3-Chloro-1-propene
3-Chloropropylene
Chlorallylene
3-クロロ-1-プロペン
3-クロロプロピレン
クロルアリレン

Molecular Weight ; 76.53
 Melting Point ; - 134.5 °C [Merck]
 Boiling Point ; 45 °C [CHCD]
 44 - 46 °C [Aldrich]
 44 - 45 °C [Merck]
 Flashing Point ; - 32 °C [CHCD]
 - 28 °C [Aldrich]
 - 31 °C (c. c.) [Merck]

Molecular Formula; C₃H₅Cl

Chemical Structure



CAS No. ; 107-05-1
 MITI No. ; (2)-123
 ML No. ; -

Specified Chemical Substances; -

Source of Substance; Wako Junyaku Kogyo Co., Ltd.

Lot No. ; WDQ4688
 Purity ; 98.6 %

Vehicle ; DMSO

Experimental Data without Metabolic Activation

Substance	Treatment		No. of Metaphase	Polyploid (%)	Judge-ment	Cell with Structural Chromosome Aberration (%)								
	Time (h)	Concentration (mg/ml)				Chromatid		Chromosome		Total		Judge-ment		
						Gap	CTB	CTE	CSB	CSE	-G		+G	
DMSO	24		200	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
	48		200	0.0	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-	
Test Chemical	24	0.2	200	1.0	-	0.0	0.5	0.5	0.0	0.0	1.0	1.0	-	
		0.3	200	2.0	-	2.5	3.5	4.0	0.0	0.0	7.5	9.0	±	
		0.4	200	7.0	±	1.0	5.5	11.5	0.0	0.0	15.5	15.5	+	
		0.5	200	3.5	-	9.5	30.0	37.5	0.0	0.0	52.0	52.5	+	
		0.6	200	0.5	-	12.5	48.0	55.5	0.0	0.0	75.0	75.0	+	
		48	0.2	200	2.0	-	0.0	1.5	2.0	0.0	0.0	3.5	3.5	-
		0.3	200	1.0	-	1.5	3.5	3.0	0.0	0.0	6.0	6.5	±	
0.4	200	5.0	±	5.0	13.5	16.0	0.0	0.0	24.0	25.0	+			
0.5	200	21.0	+	9.5	27.0	33.0	0.0	0.0	45.0	46.0	+			
0.6	157	14.6	+	10.8	35.0	51.6	0.0	0.6	69.4	70.1	+			
Positive Control	24	0.00004	200	0.0	-	1.0	2.5	21.0	0.0	0.0	23.0	23.5	+	
[MMC]	48	0.00004	200	1.0	-	1.0	5.0	20.0	0.0	0.0	24.5	24.5	+	

※ The culture bottle was sealed and cultured standing after adding the test substances.

Judgement for

Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation ; not yet cited

Experimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)							Judge- ment
Substance	S9 mix	Concent- ration (mg/ml)				Chromatid		Chromosome		Total			
						Gap	CTB	CTE	CSB	CSE	-G	+G	
DMSO	-		200	1.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
	+		200	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Test Chemical	-	0.1	200	0.5	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
		0.2	200	0.5	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
		0.4	200	4.5	-	0.0	0.0	1.5	0.0	0.0	1.5	1.5	-
		0.6	200	6.5	±	0.5	2.0	15.0	0.0	0.0	15.5	15.5	+
		0.8	161	0.0	-	5.0	28.0	77.0	0.0	0.6	80.1	80.1	+
	+	0.1	200	1.5	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
		0.2	200	6.0	±	0.0	2.5	6.0	0.0	0.5	8.5	8.5	±
		0.4	200	3.0	-	0.0	5.5	11.5	0.0	0.0	13.5	13.5	+
		0.6					No observation for metaphase						
		0.8					No observation for metaphase						
Positive Control [B(a)P]	-	0.01	200	1.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
	+	0.01	200	1.0	-	1.0	6.0	17.0	0.0	0.0	21.5	21.5	+

※ The culture bottle was sealed and cultured standing after adding the test substances.