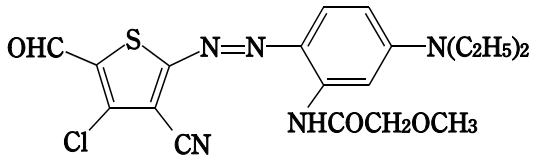
Chemical Name; 2'-(4-Chloro-3-cyano-5-formyl-2-thienylazo)-5'-diethylamino-2-methoxyacetanilide
Synonym ; N-[2-[(4-Chloro-3-cyano-5-formyl-2-thienyl)azo]-5-(diethylamino)-phenyl]-2-methoxyacetamide
N-[2-[(4-ｸﾛﾛ-3-ｼｱﾉ-5-ﾎﾙﾐﾙ-2-ﾁｴﾆﾙ)ｱｿﾞ]-5-(ｼﾞｴﾁﾙｱﾐﾉ)ﾌｪﾆﾙ]-2-ﾒﾄｷｼｱｾﾄｱﾐﾄﾞ

Molecular Weight ; 433.92
Melting Point ; ≧ 300 ℃
Boiling Point ; — ℃
Flashing Point ; — ℃
Molecular Formula; $C_{19}H_{20}ClN_5O_3S$

Chemical Structure



CAS No. ; 122371-93-1
MITI No. ; [(5)-6192]
ML No. ; 8-(6)-146
Specified Chemical Substances; —

Source of Substance; —
Lot No. ; —
Purity ; —

Vehicle ; DMSO

Judgement for
Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation ; not yet cited

Exprimental Data without Metabolic Activation

Treatment						Cell with Structural Chromosome Aberration (%)							
							Chromatid		Chromosome		Total		
Substance	Time (h)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judgement	Gap	CTB	CTE	CSB	CSE	−G	+G	Judgement
DMSO	24		200	1.0	−	0.0	0.0	1.0	0.0	0.0	1.0	1.0	−
	48		200	0.0	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
Test Chemical	24	0.05 *	200	4.5	−	0.0	1.0	1.0	0.0	0.0	2.0	2.0	−
		0.1 *	200	1.5	−	0.5	0.0	3.0	0.0	0.0	3.0	3.5	−
		0.2 *	200	2.0	−	0.5	3.0	2.0	0.0	0.0	5.0	5.0	±
		0.4 *	200	0.5	−	6.0	19.0	26.0	0.0	0.0	34.5	35.5	+
		0.6 *	200	1.0		20.5	48.5	39.5	0.0	0.0	79.5	80.0	+
	48	0.05 *	200	16.5	+	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
		0.1 *	200	26.0	+	0.0	0.5	0.5	0.0	0.0	1.0	1.0	−
		0.2 *	200	34.5	+	0.0	1.0	3.0	0.0	0.0	4.0	4.0	−
		0.4 *	200	18.5	+	2.0	1.5	9.5	0.0	0.0	10.5	10.5	+
		0.6 *	171	14.0	+	0.6	5.3	38.6	0.0	0.0	40.9	40.9	+
Positive Control [MMC]	24	0.00004	200	1.5	−	1.0	11.0	44.0	0.0	0.0	46.5	47.0	+
	48	0.00004	200	2.0	−	1.0	11.0	52.0	0.0	0.0	55.5	55.5	+

* Test chemical was precipitated.

Exprimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid (%)	Judge-ment	Cell with Structural Chromosome Aberration (%)							
Substance	S9 mix	Concent-ration (mg/ml)					Chromatid		Chromosome		Total		Judge-ment
						Gap	CTB	CTE	CSB	CSE	−G	+G	
DMSO	−		200	1.0	−	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
	+		200	0.0	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
Test Chemical	−	0.013 *	200	0.5	−	0.0	0.0	0.5	0.0	0.0	1.0	1.0	−
		0.032 *	200	2.0	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
		0.08 *	200	4.5	−	0.0	0.0	1.0	0.0	0.0	1.0	1.0	−
		0.2 *	200	12.0	+	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
		0.5 *	200	4.0	−	0.0	0.5	0.5	0.0	0.0	1.0	1.0	−
	+	0.013 *	200	2.0	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
		0.032 *	200	0.5	−	0.0	0.5	0.0	0.0	0.0	0.5	0.5	−
		0.08 *	200	2.5	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
		0.2 *	200	0.5	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
		0.5 *	200	0.0	−	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
Positive Control [B(a)P]	−	0.01	200	3.5	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
	+	0.01	200	0.5	−	0.0	2.0	27.5	0.0	0.0	28.0	28.0	+

* Test chemical was precipitated.