



>>Entry Name: Mitoguazone, INN

Synonym(s): 2,2'-(1-Methyl-1,2-ethanediylidene)bis[hydrazinecarboximidamide], 9Cl. 1,1'-[(Methylethanediylidene)dinitrilo]diguanidine, 8Cl. Methylglyoxal bisguanyldihydrazone. Methyl GAG. MGBG

CAS Registry Number: 459-86-9

Related CAS Registry Numbers(s): 7059-23-6

HN=C(NH2)NHN=C(CH3)CH=NNHC(NH2)=NH

Molecular Formula: C₅H₁₂N₈

Molecular Weight: 184.203

Accurate Mass: 184.118492

Percentage Composition: C 32.60%; H 6.57%; N 60.83%

Use/Importance: Antineoplastic agent (inhibits polyamine biosynth.)

Physical Description: Cryst. + ½H₂O (2-propanol)

Other Data: Dec. at 225°

Hazard & Toxicity: LD₅₀ (rat, ipr) >150 mg/kg. Exp. reprod. effects. Mutagenic props.

>>Derivative: Hydrochloride (1:2)

Synonym(s): NSC 32946

CAS Registry Number: 31959-87-2

Extra CAS Registry Numbers(s): 24968-67-0

Physical Description: Cryst. + 2H₂O (Me₂CO)

Melting Point: Mp 256-257 dec.°

Hazard & Toxicity: Skin irritant (rbt). Exp. neoplastic agent

References:

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Oliverio, V.T. *et al.*, *J. Pharmacol. Exp. Ther.*, 1963, **141**, 149, (*metab*)
Kensler, C.J. *et al.*, *Cancer Res.*, 1965, **25**, 1622, (*tox*)
Hamilton, W.C. *et al.*, *Acta Cryst. B*, 1968, **24**, 1147, (*cryst struct*)
Cain, B.F. *et al.*, *J. Med. Chem.*, 1969, **12**, 199, (*pharmacol*)
Rosenblum, M.G. *et al.*, *J. Chromatogr.*, 1980, **183**, 363, (*hplc*)
Stewart, D.J. *et al.*, *Cancer Chemother. Pharmacol.*, 1981, **7**, 31, (*metab*)
Dunzendorfer, U. *et al.*, *Arzneim.-Forsch.*, 1986, **36**, 506, (*pharmacol*)
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