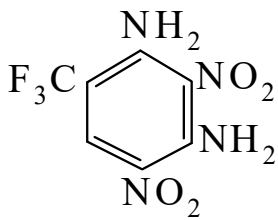




>>Entry Name: 2,4-Dinitro-6-(trifluoromethyl)-1,3-benzenediamine, 9CI



Molecular Formula: C₇H₅F₃N₄O₄

Molecular Weight: 266.136

Accurate Mass: 266.02629

Percentage Composition: C 31.59%; H 1.89%; F 21.42%; N 21.05%; O 24.05%

>>Derivative: N³,N³-Di-Et

Synonym(s): N³,N³-Diethyl-2,4-dinitro-6-(trifluoromethyl)-1,3-benzenediamine, 9CI. N',N'-Diethyl-2,6-dinitro-4-trifluoromethyl-*m*-phenylenediamine. **Dinitramine**, BSI, Cobex, Kobex

CAS Registry Number: 29091-05-2

Molecular Formula: C₁₁H₁₃F₃N₄O₄

Molecular Weight: 322.243

Accurate Mass: 322.08889

Percentage Composition: C 41.00%; H 4.07%; F 17.69%; N 17.39%; O 19.86%

Use/Importance: Selective preemergent herbicide

Physical Description: Yellow cryst.

Melting Point: Mp 98-99°

Solubility: V. spar. sol. H₂O; sol. EtOH; v. sol. Me₂CO

Hazard & Toxicity: LD₅₀ (rat, orl) 3000 mg/kg. LD₅₀ (rbt, skn) 2000 mg/kg

>>Derivative: N³,N³-Dipropyl

Synonym(s): 2,4-Dinitro-N³,N³-dipropyl-6-(trifluoromethyl)-1,3-benzenediamine, 9CI. α,α,α-Trifluoro-3,5-dinitro-N⁴,N⁴-dipropyl-2,4-toluenediamine. 2,6-Dinitro-N¹,N¹-dipropyl-4-trifluoromethyl-*m*-phenylenediamine. **Prodiamine**, ANSI, BSI, ISO, WSSA

CAS Registry Number: 29091-21-2

Molecular Formula: C₁₃H₁₇F₃N₄O₄

Molecular Weight: 350.297

Accurate Mass: 350.12019

Percentage Composition: C 44.57%; H 4.89%; F 16.27%; N 15.99%; O 18.27%

Use/Importance: Herbicide. Cell division inhibitor

Physical Description: Yellow cryst.

Melting Point: Mp 124°

Hazard & Toxicity: LD₅₀ (rat, orl) > 5000 mg/kg

References:

U.K. Pat., 1969, 1 268 584; *CA*, **73**, 120287 and 120295

Ger. Pat., 1970, 2 013 509; *CA*, **73**, 120287c, (*synth, Prodiamine*)

Newsom, H.C. *et al.*, *J. Agric. Food Chem.*, 1972, **20**, 1222, (*glc*)

U.S. Pat., 1978, 4 091 096; *CA*, **90**, 82140r, (*synth, activity, Prodiamine*)

Pesticide Manual, 9th edn., 1991, Nos. 5070; 10030

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, CNE500; DWS200