



>>Entry Name: Nitrourea, 9CI, 8CI

Synonym(s): *N*-Nitrocarbamide

CAS Registry Number: 556-89-8

$\text{H}_2\text{NCONHNO}_2$

Molecular Formula: $\text{CH}_3\text{N}_3\text{O}_3$

Molecular Weight: 105.053

Accurate Mass: 105.017442

Percentage Composition: C 11.43%; H 2.88%; N 40.00%; O 45.69%

Use/Importance: Used as a defoliant, has bactericidal activity and also inhibits neoplasms

Physical Description: Leaflets or prisms (EtOH) or platelets(EtOH/petrol)

Melting Point: Mp 159°

Solubility: Sol. hot H_2O (aq. solns. unstable); v. sol. Me_2CO , AcOH; sol. EtOH; spar. sol. CHCl_3 , C_6H_6 , petrol

Other Data: Dec. in alkalis. Can be detonated, but is not sensitive to percussion or heating

Rare Chemicals Library: S82529-8

References:

Org. Synth., Coll. Vol., I, 1932, 417, (synth)

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Piskorz, M. *et al.*, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, 1963, **11**, 615, (ir, uv)

Kuznetsov, V.M. *et al.*, *CA*, 1978, **89**, 199883, (haz)

Liu, K.-C. *et al.*, *J. Chin. Chem. Soc. (Taipei)*, 1978, **25**, 77, (synth)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, NMQ500

Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworths, 1990, 0440

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