



>>Entry Name: Di-2-propenoylmethanediamine

Synonym(s): *N,N'*-Methylenebis-2-propenamide, 9CI. *N,N'*-Methylenebisacrylamide, 8CI. *N,N'*-Diacryloylmethylenediamine. Bisacrylamide. Methylenebisacrylamide. Methylenediacrylamide

CAS Registry Number: 110-26-9

$\text{H}_2\text{C}(\text{NHCOCH}=\text{CH}_2)_2$

Molecular Formula: $\text{C}_7\text{H}_{10}\text{N}_2\text{O}_2$

Molecular Weight: 154.168

Accurate Mass: 154.074228

Percentage Composition: C 54.54%; H 6.54%; N 18.17%; O 20.76%

Use/Importance: Used in manuf. of polyacrylamide gels; crosslinking agent for acrylamide hydrogels

Physical Description: Cryst. (H_2O or $\text{Me}_2\text{CO}/\text{H}_2\text{O}$ aq.)

Melting Point: Mp 185°

Solubility: Sol. H_2O

Other Data: Mp. sometimes quoted as >300°: this refers to polymerisation prods.

Hazard & Toxicity: Skin sensitiser

References:

Magat, E.E. *et al.*, *J.A.C.S.*, 1951, **73**, 1028-1031, (*synth*)

Feuer, H. *et al.*, *J.A.C.S.*, 1953, **75**, 5027-5029, (*synth*)

Sawicki, E. *et al.*, *Anal. Chem.*, 1962, **34**, 1460-1464, (*anal, uv*)