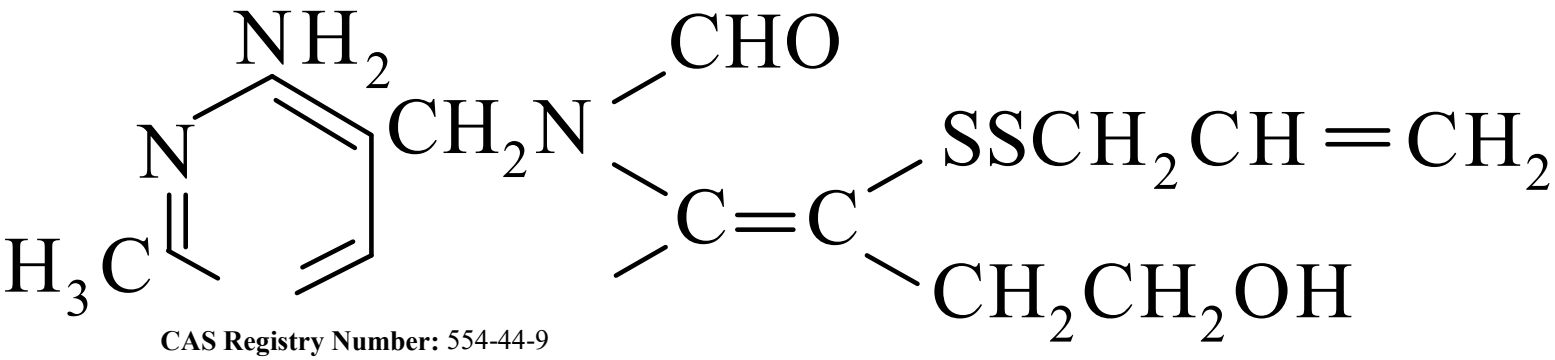
>>**Entry Name: Allithiamine**

**Synonym(s):** *N*-[(4-Amino-2-methyl-5-pyrimidinyl)methyl]-*N*-[4-hydroxy-1-methyl-2-(2-propenyldithio)-1-butenyl] formamide, 9CI



**CAS Registry Number:** 554-44-9

**Molecular Formula:** $C_{15}H_{22}N_4O_2S_2$
**Molecular Weight:** 354.496
**Accurate Mass:** 354.118416
**Percentage Composition:** C 50.82%; H 6.26%; N 15.80%; O 9.03%; S 18.09%
**Biological Source:** Obt. from garlic (*Allium sativum*)
**Use/Importance:** Imparts meaty flavour to foods
**Biological Use/Importance:** Has vitamin $B_1$ activity. Investigated as a dietory supplement to enhance muscle performance in sports. Suggested as a treatment for Thiamine deficiency
**Physical Description:** Cryst. ($C_6H_6$)
**Melting Point:** Mp 132-133 dec.°

**References:**


Matsukawa, T. *et al.*, *Science (Washington, D.C.)*, 1953, **118**, 325, *(isol, struct)*
Matsukawa, T. *et al.*, *CA*, 1955, **49**, 7572g, *(synth)*
Baker, H. *et al.*, *J. Nutr. Sci. Vitaminol.*, Suppl., 1976, **22**, 63-68, *(pharmacol)*
Doyle, M.R. *et al.*, *Int. J. Sport Nutr.*, 1997, **7**, 39-47, *(use)*