



>>Entry Name: **1,4-Diguanidinobutane**

Synonym(s): *N,N*'"-1,4-Butanediylbisguanidine, 9Cl. **Arcaïne**

CAS Registry Number: 544-05-8

$\text{HN}=\text{C}(\text{NH}_2)\text{NH}(\text{CH}_2)_4\text{NHC}(\text{NH}_2)=\text{NH}$

Molecular Formula: $\text{C}_6\text{H}_{16}\text{N}_6$

Molecular Weight: 172.233

Accurate Mass: 172.143644

Percentage Composition: C 41.84%; H 9.36%; N 48.79%

Biological Source: Occurs in marine bivalve *Arca noae* and in *Panus tigrinus*. Also from the marine polychaete worm *Audouinia tentaculata*

Use/Importance: Lowers blood sugar of mammals

>>Derivative: Sulfate

CAS Registry Number: 14923-17-2

Extra CAS Registry Numbers(s): 36587-93-6

Physical Description: Needles

Melting Point: Mp 291 dec.°

>>Derivative: Picrate

Physical Description: Needles or fine powder

Melting Point: Mp 251-254 dec.°

References:

Kutscher, F. *et al.*, *Hoppe Seyler's Z. Physiol. Chem.*, 1931, **199**, 27; **203**, 132, (*isol*)

Sugino, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1942, **17**, 126; *CA*, **41**, 4455, (*synth*)

Roche, J. *et al.*, *C. R. Hebd. Seances Acad. Sci.*, 1965, **260**, 7023, (*isol*)

Boldt, A. *et al.*, *Phytochemistry*, 1971, **10**, 731, (*biosynth*)

Thailambal, V.G. *et al.*, *Acta Cryst. C*, 1985, **41**, 105, (*cryst struct*)