(9) Quinuclidin-3-ol, $C_7H_{13}NO$
CAS No. 1619-34-7
HS No. 29.33.90.00
NIOSH/RTECS No. VD 6191700
Merck 8110

Synonyms: 3-quinuclidinol, 3-hydroxyquinuclidine

Physical Characteristics: MW: 127, R form m.p.: 223-4° $[a]_D^{20}$ + 45.3°, S form mp: 223-4° $[a]_D^{20}$ - 45.1°.

Synthesis: It is obtained in quantitative yield by the hydrogenation of 3-quinuclidone using either a platinum catalyst or raney nickel. A three step process from 3-vinylpyridine has also been described. (L.H. Sternbach et al., J.A.C.S., 74, 1331, 1952; and H.S. Aaron et al., J. Org. Chem., 30, 1331, 1965).

Toxicology: No detailed information available.

Uses: It has been described as a reagent to cleave∝-keto esters, used in the synthesis of pharmaceuticals and has been used as a hypotensive agent.

Suppliers: Six producers have been identified worldwide in France (4), Switzerland (1) and Norway (1).

Literature Survey:

Examination of Chemical Abstracts from 1986 till May 1992 produced from 65 references from 14 countries; 43% of the references came from industry and 41.5% referred to the patent literature (Annex1).