

(3) BZ: 3-Quinuclidinyl benzilate  $C_{21}H_{23}NO_3$   
CAS No. 6581-06-2  
HS No. 29.39.90  
NIOSH/RTECS No. DD 4638000  
see Merck 8110

**Synonyms:** 1-azabicyclo (2.2.2) octan-3-ol benzilate,  
3-Chinuclidylbenzilate, R02-3308

**Physical Characteristics:** MW: 337.5; mp: 165°C

**Synthesis:** Prepared by the esterification of benzylic acid with 3-quinuclidinol; other esters would result when the latter alcohol is replaced by others; the commercial process involves diphenylchloroacetyl chloride.

**Toxicology:** Poisonous by intravenous routes; LD<sub>50</sub> is 25 mg/kg (mouse).

**Uses:** BZ is used in the preparation of clidinium bromide and also in combination with chlorodiazepoxid in several preparations used as anticholinergic e.g., Librax, Libraxin; clidinium bromide is the sole active agent in Dolibrax, it is sold as Quarzan in the USA. It is also considered to be an anxiolytic substance.

**Suppliers:** One supplier is listed for the United States.