



**>>Entry Name: Tetrabutylammonium(1+)**

**Synonym(s):** *N,N,N*-Tributyl-1-butanaminium, 9Cl

**CAS Registry Number:** 10549-76-5

**Related CAS Registry Numbers(s):** 914-45-4 2472-88-0 15522-59-5 22206-57-1 37451-68-6 38932-80-8 43064-96-6  
(H<sub>3</sub>CCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>4</sub>N<sup>(+)</sup>

**Molecular Formula:** C<sub>16</sub>H<sub>36</sub>N<sup>(+)</sup>

**Molecular Weight:** 242.467

**Accurate Mass:** 242.284774

**Percentage Composition:** C 79.26%; H 14.96%; N 5.78%

**>>Derivative: Hydroxide**

**CAS Registry Number:** 2052-49-5

**Molecular Formula:** C<sub>16</sub>H<sub>37</sub>NO

**Molecular Weight:** 259.474

**Accurate Mass:** 259.287514

**Percentage Composition:** C 74.06%; H 14.37%; N 5.40%; O 6.17%

**Use/Importance:** Strong base, suitable for use as nonaqueous titrant. Reagent for hydrol. of steroidal tosylates

**Aldrich:** 39689-3

**Fluka:** 86922

**Sigma:** T2761

**>>Derivative: Fluoride**

**CAS Registry Number:** 429-41-4

**Extra CAS Registry Numbers(s):** 87749-50-6

**Molecular Formula:** C<sub>16</sub>H<sub>36</sub>FN

**Molecular Weight:** 261.465

**Accurate Mass:** 261.283177

**Percentage Composition:** C 73.50%; H 13.88%; F 7.27%; N 5.36%

**Use/Importance:** Catalyst for aldol condensations, acetylations etc. Fluoride ion source. Used to cleave silyl ethers

**Physical Description:** Cryst. + 18H<sub>2</sub>O

**Melting Point:** Mp 37°

**Other Data:** Also forms a hydrate with 32.8H<sub>2</sub>O, Mp 25°

**Aldrich:** 36139-9

**Fluka:** 86923

**Sigma:** T5392

**>>Derivative: Hydrogen difluoride**

**CAS Registry Number:** 23868-34-0

**Molecular Formula:** C<sub>16</sub>H<sub>37</sub>F<sub>2</sub>N

**Molecular Weight:** 281.472

**Accurate Mass:** 281.289405

**Percentage Composition:** C 68.28%; H 13.25%; F 13.50%; N 4.98%

**Use/Importance:** Fluorinating agent

**Melting Point:** Mp 30-32°

**>>Derivative: Chloride**

**CAS Registry Number:** 1112-67-0

**Molecular Formula:** C<sub>16</sub>H<sub>36</sub>ClN

**Molecular Weight:** 277.92

**Accurate Mass:** 277.253626

**Percentage Composition:** C 69.15%; H 13.06%; Cl 12.76%; N 5.04%

**Melting Point:** Mp 73-75°

**Aldrich:** 39687-7

**Fluka:** 86870

**Sigma:** T7532