

Drug Status Report

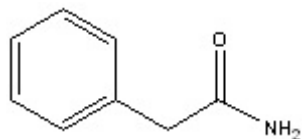
Drug: Phenylacetamide

Drug Name Status: α -Phenylacetamide is the common name.

Chemical Name: 2-phenylacetamide is the chemical name

Other names: Benzeneacetamide; phenylacetic acid amide; α -toluamide; α -tolumidic acid; phenyl- β -acetylamine

Chemical structure:



Molecular Formula: C₈H₉NO

Pharmacological class / Application: fine chemical

International status:

US: α -Phenylacetamide is not currently listed on the Schedules to the CSA and is not mentioned on the DEA website.

United Nations: The chemical is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control. α -Phenylacetamide is also not present on the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.

Canadian Status: α -Phenylacetamide is a chemical reagent and is often used in the synthesis of penicillin¹. Phenylacetic acid and its salts are considered Class A Precursors and listed as item 12 in Part 1 of Schedule VI to the CDSA. While α -phenylacetamide may be prepared from phenylacetic acid *via* the Willgerodt rearrangement reaction², the substance is not a salt of phenylacetic acid. Accordingly, it is not included under item 12 "Phenylacetic acid and its salts" in Part 1 of Schedule VI to the CDSA.

¹Torri, S. *et al.* (1984) Penicillin-cephalosporin conversion. XI. Synthesis of 7-(α -substituted phenylacetoamide) cephalosporins by utilization of all the framework elements of penicillin G, *Tetrahedron Lett.* **25**:1801-1804.

²DeTar, D. And Carmack, M. (1946) The Willgerodt Reaction. II. A study of reaction conditions with acetophenone and other ketones, *J. Am. Chem. Soc.* **68**:2025-2029.

Recommendation: α -Phenylacetamide is not included in any of the Schedules to the CDSA and is not considered to be a controlled substance nor a precursor.

April 26th, 2010