

Nicotine, an alkaloid, is a natural product found predominately in tobacco plants such as *Nicotiana tabacum*. Nicobrand processes raw nicotine through a series of purification stages culminating in vacuum distillation. This produces a very pure form of nicotine free base.

Molecular Formula: $C_{10}H_{14}N_2$
Molecular Weight: 162.23
CAS: 54-11-5
Physical state: Liquid

Pharmacopoeia Compliance: EP, USP

Drug Master Files/Common Technical Document:

US: Yes
 EU: Yes

Nicobrand Specification:

Appearance: Clear and free from suspended matter
Specific Optical Rotation: - 130 to -143 at 25°C
Water Content: ≤ 0.50%
Heavy Metals: ≤ 0.002%

Quantities:

Batch Size: 500kg
 (smaller commercial quantities available)
Samples: On request
 (Shipping costs excluded)

Assay:

Nicotine content by non-aqueous titration: 99.0% to 101.0%

Applications:

Nicotine Free Base (Pharmaceutical Grade Nicotine > 99%) is the active ingredient in many smoking cessation products, the most common being transdermal patches.

Chromatographic Purity:

By HPLC:
 Largest identified impurity: ≤ 0.30%
 Largest unidentified impurity: ≤ 0.10%
 Total Impurities: ≤ 0.8%

By GC:

Largest impurity: ≤ 0.50%
 Total impurities: ≤ 1.0%

Ref FP Protocol # : FP0001