

Nicotine Salicylate is salt of nicotine and is a white crystalline powder with a high nicotine content (~54%) and low water content

Molecular Formula: $C_{17}H_{20}N_2O_3$
Molecular Weight: 300.35
CAS: 29790-52-1
Physical state: Crystalline powder

Nicobrand Specification:

Appearance: White, lustrous crystalline powder
Solubility:

- In water: > 10 % to give clear solution
- In Methanol: > 5 % to give clear solution

PH of 10% Aq. Soln: 5.5 to 6.0
Specific Optical Rotation: +10.0 to +12.0 at 20°C
Melting Point: 115.0°C to 119.0°C
Particle Size: < 0.2 % @ 500µm
 < 2.0 % @ 250µm

Water Content: < 0.5 %
Sulphated Ash: ≤ 0.1 %
Heavy Metals: ≤ 10 ppm
Bulk Density: 0.45 to 0.65 g/mL
Residual Solvents:

- Isopropanol: ≤ 500 ppm

Assay:

Nicotine content by
 non-aqueous titration: 53.0 % to 55.0 %

Chromatographic Purity:

By HPLC:
 Largest identified
 impurity: ≤ 0.30%
 Largest unidentified
 impurity: ≤ 0.10%
 Total impurities: ≤ 0.50%

Pharmacopoeia Compliance:

Compliance Submission under consideration

Drug Master Files/Common Technical Document:

US: N/A
 EU: N/A

Quantities

Batch Size: TBD
 Samples: On request
 (Shipping costs excluded)

Applications:

Nicotine Salicylate is currently under consideration for the new generation of smoking cessation products where its high nicotine content is an attractive property.

Ref FP Protocol # : FP0008