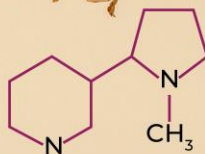


Nicotine



PRODUCT IN FOCUS



Nicotine

INTRODUCTION

Nicotine is a hygroscopic, colorless to slight yellow, oily liquid, that is readily soluble in alcohol, ether or light petroleum. It is widely used recreationally as a stimulant and anxiolytic.

MANUFACTURE

Nicotine exists naturally in some plants; the highest concentrations are found in the leaves of *Nicotiana tabacum* (the tobacco plant). Once the leaves are harvested from the tobacco plant, nicotine is extracted through steam distillation or chemical extraction processes.

Synonym	1-Methyl-2-(3-pyridyl)pyrrolidine, 3-[(2S)-1-Methyl-2-pyrrolidinyl]-pyridine
CAS no.	54-11-5
EINECS no.	200-193-3
Molecular formula	$C_{10}H_{14}N_2$
Molecular weight	162.23 g/mol
Structure	

APPLICATIONS

Nicotine has uses as a recreational drug, as a treatment for tobacco addiction, and as a pesticide.

Medical

- ✔ Nicotine is used to help treat addiction to or dependence on smoking cigarettes.
- ✔ This form of treatment is called nicotine replacement therapy (NRT). NRT products contain less nicotine than cigarettes and do not contain many harmful chemicals typically found in cigarettes.

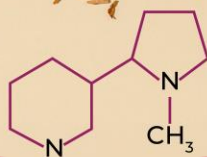
Recreational

- ✔ Nicotine is used as a recreational drug because of its mood-altering and pleasure-inducing effects.
- ✔ While cigarettes are the most common medium through which nicotine is consumed recreationally, there are other nicotine products like e-cigarettes, chewing tobacco, cigars, snuff, and pipe tobacco.

Pesticide

- ✔ Nicotine has been used as an insecticide in the form of tobacco extract.
- ✔ In nicotine producing plants, nicotine functions as an antiherbivory chemical.

Nicotine



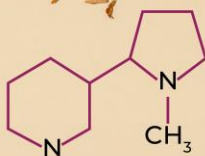
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SPECIFICATIONS...USP

Test	Unit	Specification
Description	-	Clear and colorless to slightly yellow.
Identifications		
A) By IR	-	The IR absorption spectrum of the sample is concordant with the spectrum of standard.
B) By HPLC	-	The retention time of the major peak in the chromatogram of the sample preparation corresponds to that in the chromatogram of the standard preparation, as obtained in the organic impurities.
Organic impurity by HPLC	-	As per USP specification
Nicotine related compound E	%	NMT 0.3
Nicotine related compound C	%	NMT 0.3
Nicotine related compound F	%	NMT 0.3
Nicotine related compound A	%	NMT 0.3
Nicotine related compound D	%	NMT 0.3
Nicotine related compound G	%	NMT 0.3
Nicotine related compound B	%	NMT 0.3
Any other unspecified impurity	%	NMT 0.1
Total impurity by HPLC	%	NMT 0.8
Specific optical rotation	deg	-130 to -143
Water	%	NMT 0.5
Assay (on anhydrous basis)	%	99.0 to 101.0

Nicotine



PRODUCT IN FOCUS



PACKING

1/5/25 kg stainless steel cans.

STORAGE

Store under nitrogen in well closed container below 25°C. Protected from light and moisture.

REACH status

Nicotine offered by ExSyn is registered under EU REACH regulation.

CERTIFICATION

WHO-GMP

No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.