



Butylscopolamine

Semi-Synthetic Derivative

Butylscopolamine

Semi-synthetic derivative of Duboisia leaves

Butylscopolamine oral grade

Suitable for oral pharmaceutical forms

EP DMF

Hyject™

Non-sterile API. Suitable for injectable pharmaceutical forms

EP DMF

Uses

Butylscopolamine is the world's leading and most trusted treatment for pain and discomfort caused by **abdominal muscle spasms and cramps**, thanks to its high affinity for muscarinic receptors located on **smooth-muscle cells**

Is also effective as an **analgesic** in the treatment of renal colic due to its ability to control the intense, colicky pain associated with this condition (adults and children)

Key

EP European Pharmacopeia monograph

Pharmaceutical (API)

DMF Drug Master File available

Linnea Extracts

The philosophy of Excellence

- **Australian** specialized plantations
- **Controlled** harvesting of leaves
- Regular on-site quality control by Linnea's specialists
- **Environmental control**
- Farmed in compliance with **GAPs**

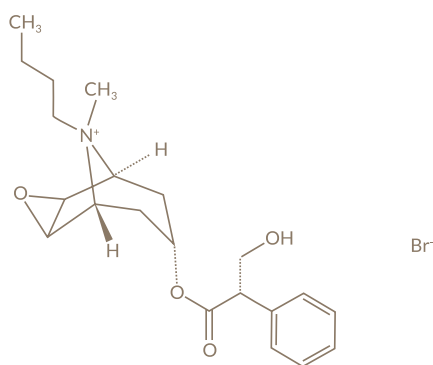
Duboisia plantations were initially established in Australia during the Second World War

In the mid-1950s, the plantations were purchased and managed by Australian farmers, who now use sophisticated and environmentally-friendly farming methods

Duboisia sp.

Technical Description

Name of the plant	Duboisia sp
Part of the plant used	Leaves
Chemical Name	(1R,2R,4S,5S,7s,9r)-9-Butyl-7-[[[(2S)-3-hydroxy-2-phenylpropanoyl]oxy]-9-methyl-3-oxa-9-azoniatricyclo[3.3.1.0 ^{2,4}]nonane bromide
Name	Hyoscine Butylbromide; Scopolamine N-Butylbromide; N-Butylscopolammonium Bromide; (1S,3S,5R,6R,7S,8R)-6,7-epoxy-8-butyl-3-[(S)-tropoyloxy] tropanium bromide
CAS number	149-64-4
Molecular weight	440.38 g/mol
Appearance	White or almost white, crystalline powder
Solubility	Freely soluble in water and methylene chloride, sparingly soluble in anhydrous ethanol
Storage	Preserve in tight container, protected from light, heat and humidity



Analytical Description

Loss on drying	NMT 2.5 %
Assay (AgNO ₃)	Between 98.0 % and 101.0 %
Related substances HPLC	Complies
Impurity A	NMT 0.10 %
Impurity B; C; D; E; F; G	NMT 0.20 %
Any other impurity	NMT 0.10 %
Total Impurities	NMT 0.40 %

Complies with the Eur. Ph. monograph: "Hyoscine Butylbromide", current edition

Discover Linnea's full range of Botanical Products:

 Butylscopolamine

 5-HTP

 Cannabis-Hemp

 Vinpocetine

 HMRLignan™

 Ginkgo biloba

 Vincamine

 Bilberry

 Red Clover

Linnea's Certificates



High level of compliance with GMPs in product manufacturing

GMP compliance certified by

swissmedic

Swiss Agency for Therapeutic Products



GMO free



Allergen, Gluten, Lactose, Melamine Free



Vegan certified



Kosher certified



Halal certified

No materials containing engineered nanomaterial are used in the manufacturing process and the product is not irradiated. The raw material, intermediates and auxiliary compounds are free from pesticides, dioxin and aflatoxins.

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