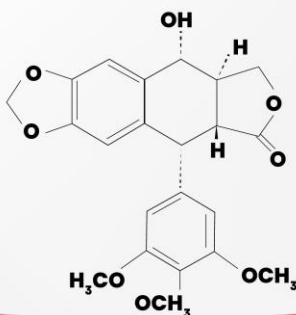


PODOPHYLLOTOXIN CRUDE



PRODUCT IN FOCUS



Podophyllotoxin Crude

INTRODUCTION

Podophyllotoxin is a non-alkaloid toxin lignan extracted from the roots and rhizomes of Podophyllum species. It is an organic heterotetracyclic compound that has a Furonaphthodioxole skeleton bearing a 3,4,5-trimethoxyphenyl substituent.

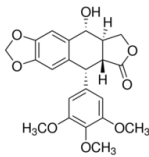
Manufacture

The two step manufacturing process involves extraction of crude Podophyllotoxin from harvested root of *Podophyllum E. modi* using suitable solvent followed by crystallization and oven drying.

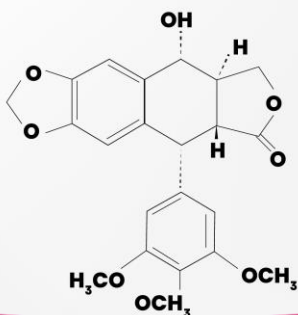
Applications

APIs

- Podophyllotoxin is classified as ATC class: D06BB04 drug and is listed in WHO's list of Essential Medicines
- Antineoplastic and antiviral activities are the most pronounced pharmacological effects of Podophyllotoxin. It is a cytotoxic agent that binds to DNA and inhibits protein synthesis
- Podophyllotoxin has also been shown to have anti-cancer effects in leukemia and other cancers, as well as being a potential anticancer drug for acute leukemia. It has been shown to induce oxidative stress and cell death in cancer cells
- It is used for the topical treatment of genital warts in children and dermatological conditions caused by Psoriasis vulgaris as well as Molluscum contagiosum infections
- It may also be used as a therapeutic agent to treat genital tumors, Wilms tumors, lung cancer, and lymphomas

Synonym	1,3,3a,4,9,9a-Hexahydro-9-hydroxy-6,7-(methylenedioxy)-4-(3',4',5'-trimethoxyphenyl)benz[f]isobenzofuran-3-one
Plant Source	<i>Podophyllum E. Modi</i>
Part of Plant	Root
CAS no.	518-28-5
EINECS no.	208-250-4
Molecular formula	C ₂₂ H ₂₂ O ₈
Molecular weight	414.41
Structure	

PODOPHYLLOTOXIN CRUDE



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SPECIFICATIONS

Test	Unit	Specification
Appearance	Visual	White to off-white powder; no visible evidence of contamination
Identification by IR	-	To conform to structure
Melting point	°C	175.0 – 185.0
Assay by HPLC	%	Min 90.0
Heavy Metals	ppm	Max 20.0
% Volatiles by LOD (2 hours, 105°C under vacuum)	%	Max 3.0
Chromatographic Purity by HPLC		
4'-Demethylpodophyllotoxin	%	Max 8.0
Specified impurity @ RRT 0.80	%	Max 0.5
Specified impurity @ RRT 1.34	%	Max 1.0
Specified impurity @ RRT 2.4	%	Max 0.5
Picropodophyllin	%	Max 0.5
Individual unknown impurities	%	Max 0.5

STORAGE

Stored at 2 °C – 8°C

PACKING

15 kg UN approved cartons

REACH Status

Not registered

ExSyn offers Podophyllotoxin Crude on commercial scales under refrigerated transport and welcomes enquiries. 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.