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## Certificate of Analysis Sheet

# Organic Zanthoxylum Essential Oil

(*Zanthoxylum armatum*)

Botanical name : Zanthoxylum alatum/armatum Roxb.  
Commercial name : Organic Zanthoxylum Sichuan Pepper  
Batch number : 111122-4  
Geographical origin : Nepal

### **Physical and chemical data :**

	Standards	Results of analysis
Appearance	Mobile clear liquid	Conform
Colour	Pale yellow to clear brown	Conform
Odour	Woody, spicy	Conform
Specific gravity at 20°C	0.815 to 0.905	0.8824
Refractive index at 20°C	1.475 to 1.490	1.4783
Optical rotation at 20°C	+1° to +45°	+7.88°
Flash point	+55°C à + 61°C	

### **Table of components (1) :**

Components	Contents
Styrene	0.05%
Alpha-thujene	0.09%
Alpha-pinene	0.19%
Sabinene	0.50%
Beta-pinene	0.16%
Myrcene	3.15%
Para-mentha-1(7),8-diene	0.03%
Alpha-phellandrene	0.37%
Alpha-terpinene	0.33%
Para-cymene	0.20%
Limonene	18.51%
Beta-phellandrene	11.69%
Cineole-1,8 (Eucalyptol)	0.22%
Z-Beta-ocimene	0.04%
E-Beta-ocimene	0.09%
Gamma-terpinene	0.47%
Cis-oxyde de linalol	0.16%
Terpinolene	0.38%
Trans-oxyde de linalol	0.12%
Linalol	50.34%
Hotrienol	0.31%
Cis-para-menth-2-en-1-ol	0.09%

**Table of components (2) :**

<b>Components</b>	<b>Contents</b>
Trans-para-menth-2-en-1-ol	0.06%
Terpinene-4-ol	0.84%
Cryptone	0.18%
Alpha-terpineol	0.30%
Decanal	0.04%
Cumin Aldehyde	0.09%
Geraniol	0.15%
Phellandral	0.14%
Methyl E-Cinnamate	9.58%
Beta-caryophyllene	0.33%
Alpha-humulene	0.05%
Gamma-cadinene	0.01%
Delta-cadinene	0.02%
Cayophyllene Oxide	0.02%
Oxygenated Sesquiterpene MW=298	0.30%
Oxygenated Sesquiterpene MW=298	0.14%
<b>TOTAL</b>	<b>99.74%</b>