



## Technical Data Sheet

### Zanthoxylum Oil

<b>Product Description:</b>	The volatile oil is obtained by steam distillation from the dried fruits of <i>Zanthoxylum armatum</i> commonly called as Nepali pepper.
<b>Country of Origin:</b>	Nepal
<b>Botanical Name:</b>	<i>Zanthoxylum armatum</i>
<b>Extract Method:</b>	Steam Distillation
<b>Plant Part Used:</b>	Fruits

#### Specifications

<b>CAS NO.</b>	91770 – 90 – 0
<b>EINECS NO.</b>	294-877-9
<b>FEMA NO.</b>	NA
<b>NAFTA NO.</b>	NA
<b>Appearance:</b>	Fluid liquid
<b>Color:</b>	Colorless to pale yellow
<b>Odor:</b>	Spicy, refreshing & pleasant
<b>Refractive Index at 25°C:</b>	1.467-1.481
<b>Optical Rotation At 25°C:</b>	5.03-9.67
<b>Specific Gravity At 25°C:</b>	0.8153-0.9050
<b>Flash Point:</b>	53 °C
<b>Quality:</b>	100% Pure & Natural
<b>Solubility:</b>	Soluble in alcohol and fixed oils but insoluble in water.
<b>Acid Value:</b>	0.5-4.5
<b>Ester Value:</b>	17.95-35
<b>Ester Value after Acetylation</b>	110-224

#### Chemical Data by GCMS

<b>Compounds Name:</b>	<b>Percentage:</b>
<b>linalool</b>	42 - 48 %
<b>d-limonene</b>	20 - 25 %
<b>β-phellandrene</b>	10 - 15 %
<b>β-myrcene</b>	4 - 6 %
<b>γ-terpinolene</b>	1 - 2 %
<b>(E)-methyl cinnamate</b>	6 - 8 %
<b>trans- linalol oxide</b>	1 - 2 %

#### Expiration Date

Shelf Life: 5+ years under good storage conditions.

Store in a well-filled, airtight container at temperature below 18°C. Avoid direct sunlight & heat.