

## 62010 Venetian Turpentine

Venice turpentine, or larch turpentine, is the oleoresinous exudation of *Larix Europaea*, or *Larix deciduas*. It is a viscous liquid of a yellowish or yellowish-green colour, and having a characteristic pleasant smell and somewhat bitter taste, the latter feature probably being due to the presence of a trace of a bitter glucosidal principle. The oleoresin itself is dextro-rotatory, whilst the essential oil is laevo-rotatory.

Venice turpentine is employed to a small extent in medicine, but is rarely found in a pure state. Most of the commercial oleoresin is a factitious article, made by mixing rosin, rosin oil and oil of turpentine together. This so-called Venice turpentine is used to a limited extent in the manufacture of sealing-wax and certain types of varnish, and also, improperly, as a substitute for the genuine article, in medicine.

The following are the analytical figures of the genuine oleoresin –

Acid value	65 – 75
Ester value	30 – 55
Saponification value	95 – 128
Iodine value	145 – 155

If the sample is factitious a mixture of the type described above, it will be indicated by the following alteration in the above figures. The acid value will be considerably raised and the ester value correspondingly lowered. The iodine value will usually be lowered. If rosin oil has been used, as is generally the case, there will be a considerable amount of unsaponifiable matter present, which can be extracted by means of ether from the aqueous saponification residue. Fabris recommends the following test for rosin oil: dissolve 5 gr in 20 cc. of 95 % alcohol and add a 10 % solution of caustic potash till the liquid is alkaline. Pure Venice turpentine remains clear, whilst, in the presence of rosin oil, oily drops separate out.

*(from "Pitman's Common Commodities and Industries, GUMS & RESINS – by Ernest J. Parry, London; Printed by Sir Isaac Pitman & Sons, Ltd, Bath, England, v-(1465E))*

### Physical and Chemical Information

Appearance	yellow transparent balsam
Odor	characteristic
Refraction index, 20°C	1,5165
Optical rotation, 20°C	+ 26.5°
Relative density, 20/20°C	1.0310
Solubility	1:2 in ethanol 80 %, sometimes slightly opalescent
Acid value	126.1
Oil content	18.5 %
Saponification value	134.2
Shelf-life	24 months, if stored according to specifications