

O60100 Sandarac Resin

(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))

This resin is derived from the North West African tree *Callitris quadrivalis*. A number of Australian *Callitris* species, which have recently been examined, yield the so-called "pine-gum" or Australian sandarac. The African sandarac, chiefly exported from Mogador is in the form of yellowish lumps dusty on the outside and easily pulverised. It is used principally for the preparation of spirit varnishes.

The resin contains a considerable amount of free acids, notably pimaric acid, and yields a small quantity of an essential oil containing dextropinene and a diterpene. It melts at about 160°C. It is soluble in alcohol, ether, acetone and numerous essential oils. Its acid value varies from 90 to 154, generally from 140 to 154.

The Sandarac resins of the Australian *Callitris* species deserve special attention, as being products of our own Empire which have recently been investigated by Messrs. Baker & Smith, of the new South Wales Technological Museum. With some species of the tree the resin is found in larger tears and masses than is common with the African resin, a peculiarity noticeable particularly in the resin of *Callitris culcavata*. That of *Callitris arenosa* very closely resembles the African variety. The chemical characters of the Australian resins appear to agree with those of the African variety.

Product Specification

Origin:	Marocco Natural oleoresin provided by the <i>Thuya Articulata</i> tree of the conifer family
Appearance:	Bright, elongated, brittle, transparent and pale yellow tears.
Odor:	Balsamic odor, slightly like turpentine.
Taste:	Especially when being heated the taste is weakly aromatic, slightly bitter.
Typical composition:	Pimaric acid (80 %), callitrolic acid and sandarinic acid (10 %) and pinene and dipentenenes (1 %)
Storage:	3 years when stored under dark, dry and cool conditions.

Physical and Chemical Properties:

Acid value:	130 – 150 mg KOH / g
Saponification value:	120 – 170 mg KOH / g
Volatile matter:	< 5 %
Total ashes:	< 0.5 %
Heavy metals:	< 20 ppm
Arsenic:	< 10 ppm

Insoluble in water, benzene and turpentine.

Soluble in alcohol, ether and acetone, but partially soluble in chloroform and turpentine.