

*usitatissimum*. When cold-drawn, the color of the oil is golden-yellow, and when hot-pressed, brown-yellow. The specific gravity is:

At 50° F.	= 0.9385
" 53½° F.	= 0.9364
" 59° F.	= 0.9350
" 68° F.	= 0.9325
" 77° F.	= 0.9300
" 266° F.	= Boiling-point.
" -16½° F.	the oil congeals to a solid yellow mass.

It is sold under different forms: Raw, refined, boiled and artist's oil. The seed should be ripe, and from two to six months old. The quality of the oil is affected by the quality of the seed, which is in turn ruled by the soil and climate in which it is grown. Boiled oil is heated to a temperature of from 266° to 600° F., and agitated mechanically for five or six hours. Water evaporates, and the scum and froth is removed from the surface with ladles; this scum is afterwards used in making putty. Equal quantities of litharge and red lead are added by slow degrees as driers, to the extent of three per cent. of the oil, a small proportion of umber being also thrown in. The heat is continued for two or three hours, when the fire is suddenly withdrawn and the oil left covered over for ten hours longer. It is now known as "boiled oil," and is stored in settling-tanks for a few weeks, during which time the uncombined driers settle to the bottom as "foots." The heating process darkens the color and causes the oil to dry quickly, producing a hard firm surface. Pure, unadulterated linseed oil is not a common article. Driers are not infrequently added through the bung-hole without boiling. Cotton-seed oil, Niger oil, hemp-seed oil, poppy-seed oil, colza oil, rape-seed oil, Lucca oil, resin oil, turpentine oil, benzine, fish oil, animal oil and water are often mixed with it, all or any of which shortens the life of the paint. There are about 17 vegetable drying oils which may be used in paint, and over 30 vegetable non-drying oils, which may be used as adulterants. The greater number of these oils are cheaper than linseed oil.