# THE SIGNIFICANCE OF THE CHEMICAL COMPOSITION AND CHARACTERISTICS OF LINSEED OIL IN RELATION TO DRYING BEHAVIOUR

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## INTRODUCTION

Flaxseed is produced primarily for the manufacture of linseed oil which is one of the principal components in the manufacture of protective coatings, linoleum, patent leather, etc. The commercial value of flaxseed depends primarily on the quantity of oil yielded and on the drying properties of the extracted linseed oil.

The drying properties depend upon the extent and rate of oxygen absorption, both of which are associated with the total degree of unsaturation. The rate of oxidation of linolenic, linolic and oleic acids decreases in the order named, and hence is influenced in part by the relative proportions of these acids present as glycerides; the total degree of unsaturation, as measured by iodine value, is taken as giving a valuable and fairly reliable index of the drying quality of linseed oils.

Since the iodine value measures only total unsaturation of an oil and does not distinguish between the unsaturated fatty acids present, it may not be always the most reliable index of quality. Thus, an oil could contain a high percentage of linolenic acid, coupled with a high percentage of oleic acid, and yet possess an iodine value approximately equal to that of an oil composed of different proportions of oleic, linoleic and linolenic; it would follow that the latter oil would be the