

LABORATORY  
OF THE  
INLAND REVENUE DEPARTMENT  
OTTAWA, CANADA

BULLETIN No. 337

LEMON FLAVOURING EXTRACT

OTTAWA, March 31, 1916.

J. U. VINCENT, Esq.,  
Deputy Minister of Inland Revenue,

SIR,—I have the honour to report upon the results of analysis of an inspection of Lemon Flavouring Extract.

This comprises 223 samples obtained by our inspectors in July, August and September of last year.

Lemon Flavouring Extract has been made the subject of inspection on three former occasions and results reported as follows:—

Bulletin 89, 1903— 27 samples.  
Bulletin 114, 1906—110 “  
Bulletin 198, 1910— 75 “

The last named report contains information intended to furnish a basis for standardization of the article, and this information is summarized thus:—

1. Extract of lemon is valued for its characteristic flavour.
2. This flavour depends upon the presence of certain constituents of lemon oil.
3. The terpenes which constitute more than 90 per cent of lemon oil, are not important from the point of view of contributing flavour to the oil.
4. It is mainly to dissolve the terpenes of lemon oil that strong alcohol is used as a solvent.
5. The citral, citronellal, and other flavour giving components of lemon oil, constitute less than 10 per cent of the oil, and may be effectively got into solution, from the oil, by weak alcohol.
6. If these flavouring components are derived immediately from fresh peel, a strong alcohol must be employed, on account of the water present in the peel. The alcohol content of the finished extract will, however, be low.
7. A good flavouring extract can be prepared either from fresh lemon peel, from lemon oil, or from so called terpeneless lemon oil. It is according to commercial usage to prepare it from the lemon oil, rather than from the peel.