

REPORT OF COLOR GLASS DEVELOPMENT COMMITTEE

SINCE the work of readjusting the Lovibond Color Glasses is now a matter of routine handling by the Electrical Testing Laboratories, this Committee has not been very active during the past year. This year's report is therefore brief.

The various matters which came before the Committee are:

(1) *Letter from Mr. Irwin.*

A letter was received from Mr. W. H. Irwin of Swift & Company in which he noted they had "had considerable difficulty in obtaining delivery on standardized color glasses during the past year, due apparently to an inadequate American stock and inability of supply houses to replenish these stocks from the Lovibond people mainly."

He suggested it would be desirable to have a manufacturer of the glasses in the U. S. and wondered if it would be possible to interest the Electrical Testing Laboratories in producing them.

Their reaction was negative, Dr. Estey advising it was against the policy and contrary to the purpose of their organization to engage in manufacturing activities of any kind.

He suggested alternatively that the problem be brought to the attention of the Spencer Lens Company of Buffalo, New York. In a letter dated March 25, 1937, their Dr. A. H. Bennett indicated his company would be in a position to consider seriously the production of the glasses as soon as a temporary shortage of man-power could be corrected, i. e., in four to six weeks.

(2) *Glasses Recalibrated.*

The Electrical Testing Laboratories report 350 glasses adjusted to the N" scale to date.

A copy of Dr. Estey's letter noting a growing interest in colorime-

ters in which small pieces of Lovibond Glasses are permanently mounted in the device is included in this report.

(3) *Glasses to Be Produced by The Tintometer, Ltd.*

When Mr. G. S. Fawcett of the Tintometer, Ltd., Salisbury, England, visited us last spring he promised he would produce a set of glasses conforming to A. O. C. S. requirements and send it to the Bureau of Standards for check.

The glasses have not been received and there has been no word from Mr. Fawcett since September 10, last year, when he advised Dr. Gibson they would be sent shortly.

(4) *The Correct Match Between Color Glasses and Oil.*

Recalibration of Lovibond glasses to N" values has made oil color grading much more satisfactory, but the problem of securing the correct match between glasses and oil still remains. There has been no satisfactory basis on which to settle differences of opinion in this regard.

With the thought that the data collected and work done by the Bureau of Standards on the spectral energy distribution curves of many oils and of the combination of glasses used to read them might offer possibilities in this direction, the matter was brought to the attention of Dr. K. S. Gibson, Chief of the Colorimetry Section, who is a member of this Committee.

Dr. Gibson thought favorably of the idea that the spectral energy curves of an oil might be used to calculate its true N" Lovibond reading and has kindly agreed to present a paper on the subject at Dallas. The title of his paper will be, "The Spectrophotometric Grading of Vegetable Oils on the N" Lovibond Scale."

Respectfully submitted,
Mr. J. W. Flynn
Dr. K. S. Gibson
Mr. W. A. Welch
Mr. A. W. Meetze
Dr. Roger S. Estey
Mr. P. E. Ronzone
L. M. Gill, Chairman

COMMITTEE CORRESPONDENCE

COLOR GLASS DEVELOPMENT COMMITTEE OF

A. O. C. S.

Address Writer at
Electrical Testing Laboratories,
80th St. and East End Ave.,
New York.

Mr. L. M. Gill, Chairman,
Darco Corporation,
60 E. 42nd St.,
New York, N. Y.

Dear Mr. Gill:

This will respond to your letter of March 11th.

We have to date regraded or adjusted about 350 Lovibond glasses. Our experience continues to indicate that these glasses, as received, have grades on the National Bureau of Standards N" scale approximately 0.1 to 0.3 units higher than the values engraved on the glasses.

There is a growing interest in colorimeters in which small pieces of Lovibond glasses are permanently mounted in the device. In calibrating such devices it should be noted that the color of a glass may not be uniform from end to end and an N" assignment for one end of a glass may not be absolutely correct for the other. The practice at E. T. L. is to make measurements at the center of complete glasses and at the point of use in the case of fragments.

Very truly yours,
(Signed) Roger S. Estey.

REPORT OF COMMITTEE ON SOAP IN REFINED OIL

THE committee's first report on analyses of soap in refined oil appeared in Oil and Soap 13 (July, 1936). A correction of same report appeared in Oil and Soap 13 (August, 1936). Two methods of analyses were discussed and the second method was admitted to be more correct in principle than the

first. Briefly, this method consisted of removing the soap from oil by several alcohol treatments, evaporating the alcohol, ashing the residue, and titrating the ash with a standard acid solution.

From a study of the results obtained last year, the procedure was modified to read as follows:

Weigh 100 grams of oil in a 200 ml. extraction cylinder. Extract *five times* with 50 ml. hot alcohol (formula 30), allow to settle and syphon off the alcohol into a 500 ml. beaker. If an emulsion is encountered, place the cylinder in hot water to facilitate the separation of alcohol and oil. Evaporate the alcohol from the