

TABLE V.
Crystallization of Mixed Fatty Acids (I. No. 137.2) from Acetone

Temp. °C.	Solvent Ratio	Filtrate Material			Precipitate			
		Actual Yield	Corrected Yield	I. No.	Actual Yield	Actual I. No.	Corrected Yield	Corrected I. No.
		Percent	Percent		Percent		Percent	
-30	2.5	27.0	71.0	167.8	73.0	124.1	29.0	55.4
	5	63.0	84.0	161.6	37.0	96.3	16.0	10.6
	10	80.0	87.0	161.0	20.0	52.1	13.0	1.1
	20	81.0	87.0	158.6	19.0	44.4	13.0	0
	30	82.0	87.0	158.1	18.0	41.7	13.0	2.9
	40	86.0	88.0	157.6	14.0	18.8	12.0	3.5
-40	2.5	20.0	26.0	173.6	80.0	116.9	74.0	112.2
	5	26.0	36.0	174.5	74.0	112.9	64.0	102.8
	10	53.0	59.0	171.5	47.0	87.0	41.0	74.4
	20	79.0	81.0	160.6	21.0	35.5	19.0	20.2
-45	10	46.0	51.0	177.7	54.0	101.6	49.0	93.3
	20	61.0	65.0	172.3	39.0	79.8	35.0	68.8
	30	82.0	84.0	162.5	18.0	28.9	16.0	9.5
	40	81.0	83.0	161.6	19.0	36.0	17.0	17.8
-47.5	10	41.0	45.0	179.5	59.0	105.8	55.0	73.2
	20	55.0	60.0	173.9	45.0	90.3	40.0	24.2
	30	68.0	71.0	170.6	32.0	66.0	29.0	11.6
	40	72.0	76.0	166.2	28.0	24.0
-60	10	16.0	22.0	185.3	84.0	128.8	78.0	124.6
	20	29.0	35.0	183.2	71.0	117.9	65.0	111.9
	30	39.0	43.0	181.9	61.0	108.4	57.0	103.3
	40	50.0	55.0	180.0	50.0	95.1	45.0	86.1
-76	10	5.0	8.0	195.1	95.0	134.1	92.0	132.1
	20	11.0	15.0	192.9	89.0	131.6	85.0	128.8
	30	13.0	16.0	190.1	87.0	129.3	84.0	127.2
	40	16.0	18.0	189.0	84.0	127.6	82.0	126.1

afforded material with an iodine number as low as 84.7 (61.3 if corrected for holdup) in rather small yield.

8. Crystallization of the mixed acids of soybean oil showed much better separation than did crystallization of the oil.

9. By a single crystallization of mixed acids, a yield as high as 50 percent of acids with an iodine number of 180 was obtained.

REFERENCES

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Report of the Referee Board 1942-1943

Twenty-six referee chemists were appointed for the year 1942-43.

Ten check samples of cottonseed, five of crude soybean oil, four of crude cottonseed oil, and one of crude peanut oil were distributed to Referee Chemists and a still larger number of voluntary collaborators.

The retiring Referee Board has no recommendations to make to the Society or to the incoming Board, but a few comments on the year's experience may be in order.

The one peanut oil sample was selected so as to be representative of a type of oil on which erratic refining losses had given considerable trouble in commercial grading. The refining losses reported by the collaborators showed somewhat more irregularity than on the average sample of cottonseed oil, but were not sufficiently discordant to prove that the refining method is defective.

While only minor difficulties were encountered in carrying out the year's program on check samples, the effect of war conditions was noticeable. There were

more delays than usual in mail and express service. Special conditions made it difficult for some of the collaborators to find time to examine the samples. Twice we were dangerously near to a critical shortage of satisfactory containers for the samples. There is no indication that war conditions will make it impossible to carry out a full program of collaborative tests during the coming season, but possibly the Society in its Annual Meeting, or the Governing Committee, or the incoming Referee Board may wish to consider whether or not such a program is appropriate for the coming year.

For handling of the tabulation of the check seed and check oil samples, the Referee Board and the Society are deeply indebted to Messrs. Doughtie, Doller and Wheeler.

G. W. AGEE
J. P. HARRIS
LAMAR KISHLAR
H. S. MITCHELL
A. S. RICHARDSON, *Chairman*.