

lower section increased the efficiency of the tower since the total vapor flow in the packed section was reduced, thereby, increasing the residence time.

To prevent buildup of the reaction products, fresh water was added continuously to the scrubber tank to force a small amount of the circulating solution to the water treatment system. Although the rate of this overflow stream was not measured, it is believed to be less than 5% of the total contribution of the deodorizing system to the water treatment load. Changing from calcium to sodium hypochlorite is also being considered, particularly if continued operation indicates that the calcium in the system causes sufficient increase in water hardness to effect the operation of the water treatment plant or to cause scaling in the tower or piping.

REFERENCES

1. General Mills advertisement, JAOCS 54:53A (1977).
2. Brandt, P.E., and B. Hornstrup-Jensen, *Ibid.* 52:278 (1975).
3. Ross, R.P., CEP 68(8):59 (1972).

[Received June 8, 1977]

ACIDS in thousand pounds		FINISHED GOODS INVENTORIES (FI)		PRODUCTION (AI)		RECEIPTS (RI)		DISPOSITION:				TOTAL DISPOSITION		FINISHED GOODS INVENTORIES (FI)	
Month	June 1979							Export (E)	Domestic Shipments (D)	Inter-Industry Shipments (DI)	Shipments to Export (EI)				
Year	August 23, 1979							Capitive Consumption (C)	Domestic Shipments (D)	Inter-Industry Shipments (DI)	Shipments to Export (EI)				
NUMBER OF MANUFACTURERS REPORTING 16		5/31												ON 6/30	

Saturated		SP - Single Pressed; DP - Double Pressed; TP - Triple Pressed													
HYDROGENATED ANIMAL & VEGETABLE ACIDS	STEARIC ACID (80-90% Stearic Content) (1)	7,542	10,815	1,548	4,063	582	5,519	3,083	60	100	12,407	7,498			
	60 C maximum titer & minimum I.V. 5 (2a)	4,903	9,385	—	—	8,119	—	—	—	157	8,276	6,012			
	57 C minimum titer & maximum I.V. under 5 (2b)	3,595	13,005	2,240	6,675	7,792	41	100	14,880	4,232					
	Minimum Stearic Content of 70% (2c)	1,471	2,418	56	886	1,743	58	19	2,706	1,242					
	HIGH PALMITIC (Over 80% palmitic I.V. maximum 12) (3)	799	655	152	311	421	—	—	—	732	898				
FRACTIONATED FATTY ACIDS	HYDROGENATED FISH & MARINE MAMMAL fatty acids (4)	462	342	—	100	419	—	—	—	519	285				
	LAURIC TYPE ACIDS (I.V. minimum 95-99% including coconut, palm kernel, babassu) (5)	5,217	7,364	56	2,713	3,132	2,552	14	8,111	4,526					
	C18 or lower, including capric (6a)	676	1,366	2	185	757	120	2	1,064	980					
	Lauric and/or myristic content of 55% or more (6b)	2,291	1,547	55	955	611	58	—	1,624	2,289					
	TOTAL SATURATED FATTY ACIDS	26,948	46,978	4,111	15,888	31,178	2,580	472	50,127	27,910					

Unsaturated		ND - Not distilled; SD - Single distilled; MD - Multiple distilled													
FRACTIONATED FATTY ACIDS	OLEIC ACID (red oil) (7)	14,658	14,272	726	7,240	3,772	5,273	2,945	158	983	16,882	12,774			
	ANIMAL FATTY ACIDS other than oleic (I.V. 38 to 80) (8)	2,204	11,112	284	1,928	7,328	439	—	—	2	9,697	3,913			
	VEGETABLE OR MARINE FATTY ACIDS (I.V. maximum 115) (9)	3	—	43	43	—	—	—	—	—	43	3			
	UNSATURATED FATTY ACIDS (I.V. 116 to 130) (10)	5,303	6,219	—	626	3,934	—	—	—	2,246	6,805	4,717			
	UNSATURATED FATTY ACIDS (I.V. over 130) (11)	1,858	2,134	—	—	1,753	—	—	—	298	2,051	2,041			
	TOTAL UNSATURATED FATTY ACIDS	24,126	33,737	1,063	9,837	21,516	587	3,528	35,478	23,448					
	TOTAL ALL FATTY ACIDS SATURATED & UNSATURATED	51,074	80,715	5,174	25,725	52,694	3,186	4,000	85,605	51,358					

JUNE 1979						
Tall Oil Fatty Acids & Statistics						
IN THOUSAND POUNDS	2% & OVER ROSIN CONTENT			LESS THAN 2% ROSIN CONTENT		
	JUNE	Percent change from MAY 1979		JUNE	Percent change from MAY 1979	
Stock on Hand JUNE 1, 1979	20,184	+	13.0	9,800	+	21.6
Production	19,507	+	4.5	20,881	—	3.5
Purchases & Receipts	1,416	+	373.6	—	—	0
Disposition	15,061	+	21.1	16,282	-	3.8
Export	4,894	+	16.2	1,446	-	48.4
Total Disposition	19,955	+	19.9	17,828	-	18.4
Net Disposition*	18,540	+	13.4	17,828	-	18.4
Total Stock JUNE 30, 1979	21,151	+	4.9	12,854	++	31.2

* Net - Less purchases & receipts.
 Definition: Fatty acids fractionated from crude tall oil having a minimum of 90% fatty acids, not including rosin acid. Primary fractions containing less than 90% fatty acids are classified as distilled tall oils.

Committee Spotlights



Flavor Nomenclature and Standards Subcommittee

A report was given on the collaborative study run this past year that compared the flavor results of four samples each of three sets of oils which had been light and temperature abused. The evaluations were made by five GLC procedures from four laboratories and the flavor panels of eight laboratories. The results indicated that the GLC methods were all more precise than any of the individual panels or the combination of all flavor panels. Only one of the GLC procedures (H. Dupuy) properly ranked samples according to abuse, but the two procedures used by Best Foods confused only one of the 12 samples which the flavor panels did not rank as significantly different. The remaining two GLC procedures mis-ranked samples that the flavor panels found to be significantly different. However, the values calculated from correlation equations for even the poorer GLC systems provided data well within the precision of the flavor panels.

The data proved that to obtain flavor panel scores from the GLC results, separate correlation equations must be developed for each type of oil, each abuse, each degree of hydrogenation or blending or manner of storage of the samples. Thus, a flavor panel would be needed to establish a reference point in each study. Since this would be too restrictive, it is the committee's decision that the GLC systems will be divorced from the flavor panel evaluations, and a means of reporting "GLC Flavor Quality" will be established such as ppm of total flavor volatiles.

The work of the committee for this year will center around a detailed comparison of the six available GC procedures as to their cost, speed, precision, etc. A single or two-method recommendation for future study should be ready for next year's meeting.

The compilation of the GLC method parameters once narrowed to a single or dual procedure will establish the collaborative study program for 1980. Since all participating laboratories would then have to assay by the proposed procedure, this procedure will have to use readily available equipment.

A similar evaluation is planned of the flavor panel score and characterization terminology so a method can be drawn as an AOCS procedure for flavor panels.

The following list is the current membership of the Subcommittee:

- | | | |
|-------------------------|--------------------|---------------|
| A.E. Waliking, Chairman | S.S. Chang | J. Covey |
| H.P. Dupuy | B. Eder | R.G. Gallant |
| E.G. Hammond | G. Hoffmann | H. Jackson |
| G.A. Jacobson | R.G. Krishnamurthy | S. Lin |
| E.R. Lowrey | R.G. Manning | W.A. May |
| D.B. Min | T.L. Mounts | J.T. Olejko |
| C.B. Pihl | J. Porkorny | S.W. Schuller |
| T.H. Smouse | D. Sullivan | A. Uzzan |
| F.M. Vallise | K.A. Warner | V.C. Witte |
| F. Zwoboda | | |