001312

PLAINTIFF'S EXHIBIT 14096.80

PLAINTIFF'S EXHIBIT WV-05835

March 22, 1962

To: Mr A. M. Ehret Trenton
cc: B. R. Stevens "
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SUBJECT: Competitive Audit Compilation March 1962

Attached is the compilation of audits of competitive materials received and tested in February and March of 1962. The figures reported for B-E-H are the weighted averages for the full year 1961. It can not be emphasized too strongly, that the values reported for competitive materials are individuals not averages. These individuals may over-state, or under-state the normal quality level of each material by a variable amount, depending on the normal range of variation for the particular process. Comparisons between B-E-H averages and competitive individual values should not be made except in a very general way.

These general observations can be made:

1. Pabco has had a major beneficial change in product characteristics after heat soak. This is the only product in this series of tests that did not lose appreciable strength after heat soak.

2. Ruberoid's "as received" strengths have improved since the last audit.

3. Detroit Edison rumble test values seem to have different levels dependant on the type of molding process practiced, rather than varying fiber blends or proportions.

4. Compressive strengths are not necessarily affected by heat soak to the same degree as are flexural strengths.

JOHN D. MCALLISTER

JDM/br

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Manufacturer	B-B[illegible]	Mundet	Paboo	Ruberoid	O-C	J-M	K&M	Carey	Ruberoid	O-C
Material	Ther-masil	Tri-calite	Cal-temp	Cal-silite	Kaylo [illegible]	Thermo-bestos	Kay-therm	Carey-Temp	Calsi-lite-Hi	Kaylo 20
Dens. pcf	11.47	11.94	12.42	12.26	11.[illegible]	12.31	12.69	9.38	13.06	13.33
Flex str psi	66.5	68.4	55.8	114.5	151.3	105.8	60.8	56.3	85.4	91.4
M/D	5.8	5.7	4.[illegible]	9.3	13.4	8.7	4.8	6.0	6.3	6.9
M/D²	0.50	0.48	0.36	0.76	1.20	0.71	0.38	0.64	0.50	0.51
M/D	0.82	1.10	0.95	1.16	1.05	1.32	1.72	0.91	1.16	1.93
Comp str psi										
5% def	97	83	106	214	125	283	111	70	95	111
10% def	136	111	131	294	160	350	186	75	118	128
Tumble loss%										
10 min	16.3	19.9	13.3	5.7	12.7	16.4	17.1	47.7	15.6	6.4
20 min	33.0	33.8	29.5	13.2	22.0	30.6	50.2	75.6	32.0	13.6
Wt loss %										
220°F	--	2.9	2.5	0.2	2.8	1.3	6.0	0.6	2.8	0.5
1050°F	7.7	7.7	9.8	7.7	7.5	9.1	10.1	7.5	7.5	3.7
1200°F	9.5	10.5	12.5	8.4	9.8	9.1	10.3	7.5	8.6	5.1
1350°F	--	11.0	12.5	9.2	10.6	9.5	10.3	7.5	8.8	6.3
1500°F	--	--	12.5	--	10.6	--	10.5	7.5	8.8	6.3
1650°F	--	--	--	--	--	--	10.5	--	8.8	6.5
1800°F	--	--	--	--	--	--	--	--	8.8	6.5
Ten. mm as is	0.76	1.27	0.89	0.42	0.51	0.35	0.66	1.62	0.72	0.69
1050°F	0.78	1.25	0.88	0.43	0.54	0.38	0.89	2.00+	0.78	0.84
1200°F	1.21	1.42	0.89	0.37	0.51	0.26	0.78	2.00+	0.70	0.85
1350°F	--	1.85	1.27	0.54	0.54	0.47	0.87	2.00+	0.76	0.80
1500°F	--	--	1.80	--	--	--	0.68	2.00+	1.16	0.89
1650°F	--	--	--	--	--	--	1.07	--	0.98	1.32
1800°F	--	--	--	--	--	--	--	--	0.64	1.56
Lin shr %										
1050°F	1.12	1.03	0.68	1.18	1.10	1.15	0.64	0.45	0.79	0.41
★ 1200°F	1.74	1.53	0.90	1.45	1.47	1.38	0.91	0.55	1.00	0.86
1500°F	--	--	warped	--	warped	--	1.40	warped	1.47	1.10
1650°F	--	--	--	--	--	--	delam	--	1.81	1.22
[illegible]	--	--	--	--	--	--	--	--	[illegible]	[illegible]
Strength after 24 hrs @ 1200°F										
Flex str psi	21.6	26.7	61.1	51.1	66.1	33.9	30.9	28.4	46.7	71.0
% of original	[illegible]	[illegible]	110.0	46.7	43.6	31.8	[illegible]	[illegible]	[illegible]	[illegible]
Comp str psi										
5% def	72	37	112	217	123	216	100	33	95	102
% of original	[illegible]	[illegible]	[illegible]	102.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	92.0

★ SEE NEXT PAGE FOR 1350°F

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Manufacturer	B-E-H	Mundet	Pabco	Ruberoid	U-C	J-M	K&M	Carey	Ruberoid	O-C
Comp str psi 10% def 122	69	150	264	160	270	154	39	118	122	
% of original	61.0	142.1	114.0	90.0	100	77.0	83.0	52.0	22.2	95.3
Detroit Edison 100 hrs @ 1050°F Rumble loss%	9.5	17.1	10.0	4.5	5.4	7.6	61.9	41.4	11.9	7.2
Canvas wt yds lbs	8.6	8.4	6.6	5.8	8.5	6.0	8.6	6.6	6.4	8.3
Appearance	Good	Fair	Good	Rough	Good	Excellent	Hairy	Good	Rough	Good
Failed at °F	1350	1350	1500	1350	1500	1350	1650	1500	1800	Above 1800
Failed for	Warped	Warped	Warped	Warped	Warped	Warped Delamin-ate	Delamin-ate	Wapred Navy Rumble	Warped	--
SHRINK 1350°C	WARP	WARP	1.17	WARP	2.02	WARP	1.19	0.60	1.29	1.01

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