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Cross Reference
Emulsion Paints

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MEMORANDUM REPORT #M-142

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COST CALCULATIONS OF SEMI-GLOSS EMULSION P-100-P-96614 - FIELD TEST 100 GALLON PLANT BATCH.

The purpose of this report is to correlate cost comparisons of P-100-P-96614 and Interior Semi-Gloss 407-R-711 at the time subject material was turned over to the Sales Department for their evaluation. (See Release Letter #1050). A further purpose is to provide a basis for comparison with future improved and revised formulae.

All costs are latest Philadelphia replacement costs except as noted. Total are for raw materials only. No estimate of manufacturing costs are included:

Summary of Comparison:

Property	407-R-711 Interior Semi-Gloss	P-100- P-96614 Semi-Gloss Emulsion
Cost per gallon as packaged	\$1.35/gal.	\$1.59/gal.
Cost per gallon as applied (wall)	\$1.35/gal.	\$1.20/gal.
Cost per gallon as applied (trim)	\$1.35/gal.	\$1.27/gal.
Covering rate at contrast ratio -.917 as packaged	970 sq.ft./gal.	975 sq.ft./gal.
Covering rate at contrast ratio -.917 as applied	970 sq.ft./gal.	800 sq.ft./gal.
Covering rate at contrast ratio -.917 per lb. TiO ₂	555 sq.ft./lb.	283 sq.ft./gal.
Cost as packaged per 1000sq.ft. at contrast ratio -.917	\$1.39	\$1.63

NOTE: In the event that patent considerations require using an oil other than DCO we recommended substituting a blend of bodied soya/ raw soya=55/45. This would change the raw material cost for P-100-P-96614 as packaged to \$1.58/gallon, a saving of 1¢/gallon.

From the above results it is apparent that we are not obtaining maximum hiding efficiency in our emulsion paint. A program will be undertaken to study methods of improving hiding efficiency. Pigment packing effect will be considered and various extenders will be evaluated.

A complete breakdown of cost figures for both paints is listed below.

<u>Material</u>	<u>#/100 gallon (packaged)</u>	<u>Cost/#</u>	<u>Cost/100 gal.</u>
H-506	175.	-	-
K-2770	30.80	*.3550	10.920
W-14	4.05	.0326	.132
H-502	2.34	.1122	.262
KG-2680	3.30	*.0975	.322
KG-2768	3.07	.1225	.376
H-284	1.01	.0306	.309
PVG-P-89801			
H-512	3.43	*.2400	.823
H-732 (H-154)	7.57	.3137	2.380
PVG-P-89836			
KG-3552	.30	** .5000	.150
H-506	14.70	-	-
PVG-P-94067			
H-156	158.00	.2978	46.900
G-218	.31	*.2400	.075
H-506	.62	-	-
G-419	32.80	.3924	12.900
G-243	55.80	.1479	8.250
H-224	25.60	.2262	5.800
VD-1450	19.75	.1395	2.750
VD-1846	1.31	.1225	.160
H-502	8.53	.1122	.946
PRG-P-81517			
W-43	344.00	.1919	66.000
P-40-P-96627			
H-506	182.00	-	-

159.450

* Price from current edition, "Oil, Paint and Drug Reporter".

* * Cost estimated on basis of small scale production.

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Revision to this memorandum will be issued from time to time to keep abreast of significant cost and formula changes.

These figures are recorded in Notebook 3340, Page 95 ff.

PHILADELPHIA LABORATORY

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CWS:mc