Glidden Form 1809-1 Printed in U.S.A. 9/65

Product	Endurance Imperial House Paint	Formula Number	Y-1867-I
Customer	Mfg. plants #8-12-15 Only	Laboratory Number	(Temporary)

CODE NUMBER	100 GALLON BATCH GALLONS	100 GALLON BATCH POUNDS	% BY WEIGHT	MANUFACTURING INSTRUCTIONS
Y-280 W-635	5.22	170.0		
Y-290 W-830	2.61	90.0		
Y-294 W-547	5.88	275.0		
Y-104 W-41	0.63	36.0		
Y-188 W-43	12.86	303.0		
Y-218 E-11	0.23	1.5		Premix and add
S-91 S-213	0.25	1.8		immediately to mill.
O-232 O-128	34.60	269.0		
T-855	11.20	93.0	V-2197	
O-285 O-131	9.20	74.0		
S-43 S-230	11.70	76.0		
S-148 S-348	4.50	30.0		
VM-132 E-3	1.13	10.7		
VM-534 E-334	0.11	0.9		
Yield	100.12	1432.9		

R.M. Cost	Warehouse	Date	7/11/
Mill	Pebble or	Grind	3-4
% Lead	More than 1%		
Wt./Gal.	14.2		Method
Flash Pt. °F.			Method
N.V. Wt.			Method
N.V. Vol.			Method
Visc. F.B.	82-87		Method
Visc. Red.			Method
Reducer			Ratio
P.V.C.			pH
Color			Match
Gloss	70 min.		Method
Strainer			
Container			
Label Warning	#14-62 MPVLA		
Application	Brush		
Cure	Overnight		
	Recoat: 72 hours.		
Remarks:	To use up stocks of		
	Y-104 only.		
Formulator	Green/Southwick		
Approved by	S. Bowell		

N12405

GLD060686

GLIDDEN PRO-R PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1367-H(N.O.Alt.)

GOODS Endurance Imperial House Paint White,

LABORATORY NO. [illegible]

CONSISTENCY-- Mildew Resistant

COST CLASS

DATE 1/25/65

FOR USE ON-- Mfg. at Plant #4 Only

STRAINER Pebble

GRIND 14.3

CUSTOMER Label Warning 14-62 NPVLA

MILL

WT. OR BE

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-249				(6.82)	325.0	
W-91				(4.312)	140.0	
W-208				(2.987)	103.0	
W-188				(12.90)	303.5	
VH-308				(0.06)	4.4	
W-218) PREMIX				(0.18)	2.7	
S-91)				(0.20)	(1.35)	
O-132						
~~V-955~~ V-855				34.6	(269.0)	
~~O-286~~				11.2	(93.0)	
~~S-43~~				9.2	(74.0)	
~~S-148~~				12.0	(78.0)	
				4.5	(30.0)	
~~VH-432~~						
~~VH-534~~				1.13	(10.7)	
~~VH-659~~				0.11	(0.9)	
				0.50	(4.05)	
ISSUED AT THE REQUEST OF NEW ORLEANS FOR CREATER MILDEW RESISTANCE.						
(OVER)						
YIELD				100.56	1438.65	

Standard Formula, Not to be taken from File.

IS AGITATOR REQUIRED

VISC. F. B 82-87 KU TEMP. 80°F

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON VOL. 91.7% FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As Needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN D.H.

A. D. TO RECOAT IN 72 hrs.

REMARKS:

N.V. by Wt. 91.7%

N.O. by Vol. 62.1

PVC 33.1

FORMULATOR J. C. Pedarre, Jr.

GLD060687

COST	DATE	ANALYSIS	CUSTOMERS
		PIGMENT %	Y-1867-H(N.O
		VEHICLE 61.1 %	Endurance Imperial House Paint W
		38.9	Mildew Resistant
		100.0%	
		PIGMENT	1/25/65
		Titanium Dioxide 27.4%	Warning No. 14-62 NEVLA
		Magnesium Silicate 35.5	
		18% Monobasic	Contains added fungicide to ma
		Leaded Zinc Oxide 37.1	this paint resistant to the
		100.0%	action of mildew fungi growing
			in or on the paint.
		VEHICLE	Di(Phenyl-Mercury).
			Dodecenyl Succinate 0.08%
		Linseed Oil, Alkyd Resin 78.3%	Inert Ingredients 99.92
		Mineral Spirits & Driers 21.7	100.00%
		100.0%	
			Mfg. plant #4
			#16 1-29-65 ①
			#30 (Bowell + Southwick) " per TMS

Y-1867

561

GLD060688

GLIDDEN 480-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-H(N.O.alt.)

GOODS	Endurance Imperial House Paint White,	LABORATORY NO.	
CONSISTENCY	Mildew Resistant	COST CLASS	DATE 1/25/65
FOR USE ON	Mfg. at Plant #4 Only	STRAINER Pebble	GRIND 14.3
CUSTOMER	Label Warning 14-62 NPVLA	MILL	WT. OR BE

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-249				(6.82)	325.0	
W-91				(4.312)	140.0	
W-208				(2.987)	103.0	
W-188				(12.90)	303.5	
VH-308				(0.06)	4.4	
W-218) PREMIX				(0.18)	2.7	
S-91)				(0.20)	(1.35)	
O-132				34.6	(269.0)	
V-855				11.2	(93.0)	
O-286				9.2	(74.0)	
S-43				12.0	(78.0)	
S-148				4.5	(30.0)	
VH-432				1.13	(10.7)	
VH-534				0.11	(0.9)	
VH-659				0.50	(4.05)	
ISSUED AT THE REQUEST OF NEW ORLEANS FOR GREATER MILDEW RESISTANCE.						
(OVER)						
YIELD				100.56	1438.65	

Standard Formula. Not to be taken from file.

IS AGITATOR REQUIRED

VISC. F.B2-87 KU	TEMP 80°F
VISC. RED.	TEMP.
VISCOSIMETER Stormer	
COLOR White	SHEEN
NON VOL 91.7%	FLASH P 100°F
MATCH FOR	
REDUCER S-43	
AMT. FOR BRUSHING As Needed	
SPRAYING	TUMBLING
DIPPING	DRIP TIME
BAKE	TEMP.
AIR DRIES IN O.H.	
A. D. TO RECOAT IN 72 hrs.	
REMARKS:	
N.V. by Wt. 91.7%	
N.O. by Vol. 82.1	
PVC 33.1	
FORMULATOR J. C. Pedarre, Jr.	

GLD060689

COST	DATE	ANALYSIS		CUSTOMER'S Y-1867-H(N.O.
		PIGMENT 61.1 %		Endurance Imperial House Paint Whi
		VEHICLE 38.9 %		Mildew Resistant
		100.0%		
				1/25/65
		PIGMENT		
		Titanium Dioxide	27.4%	Warning No. 14-62 NYLA
		Magnesium Silicate	35.5	
		18% Monobasic		Contains added fungicide to make
		Leaded Zinc Oxide	37.1	this paint resistant to the
			100.0%	action of mildew fungi growing
				in or on the paint.
				Di(Phenyl-Mercury).
		VEHICLE		Dodecenyl Succinate 0.08%
		Linseed Oil, Alkyd Resin 78.3%		Inert Ingredients 99.92
		Mineral Spirits & Driers 21.7		100.00%
		100.0%		
				Mfg. plant #4
				#16 2-2-65
				#30 (Southwest Brazil)
				per TRS
	Y-1867	561		

GLD060630

GILDEN 480-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-H (N.O. Alt.

GOODS Endurance Imperial House Paint White

LABORATORY NO.

CONSISTENCY Mildew Resistant

COST CLASS DATE 9/22/65

FOR USE ON

STRAINER GRIND 3.4

CUSTOMER Label Warning 14-62 NPVLA

MILL Pebble WT. OR BC 14.3

CODE NUMBER	ONE GALLON BATCH			LARGE BATCH		
	PINTS	LBS.	OZS.	GALS.	LBS.	OZS.
W-249				(6.82)	325.0	
W-280				(4.31)	140.0	
W-290				(2.99)	103.0	
W-188				(12.90)	303.5	
VM-306				(0.06)	4.4	
W-218)				(.18)	2.7	
S-91)				.20	(1.35)	
O-132				34.6	(269.0)	
O-286				9.6	(74.0)	
V-855				11.2	(93.0)	
S-43				12.0	(78.0)	
S-148				4.5	(30.0)	
VM-432				1.13	(10.7)	
VM-534				.11	(0.9)	
VM-659				.50	(4.05)	
YIELD				100.56	1438.65	

NEW ORDER

IS AGITATOR REQUIRED

VISC. F. 82-87KU TEMP. 80°F

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON VOL 91.7% FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

N.V. Vol 82.1% PVC 33.1%

AIR DRIES IN O.N.

A. D. TO RECOAT IN 72 hrs.

REMARKS:

Void formula

Date 1-25-65

Changed to use active raw material

FORMULATOR J.C. Pedarra

GLD060691

[illegible]	[illegible]	ANALYSIS	CUSTOMERS
		PIGMENT %	# 4-26
		VEHICLE %	
		PIGMENT	
		VEHICLE	

GLD060692

SHERWIN-WILLIAMS PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-H (Cowles-Morehouse)

GOODS Endurance Imperial House Paint - White

LABORATORY NO. BASE

CONSISTENCY

COST CLASS. DATE 12/5/62

FOR USE XXX Mfg. at plants #1-2-4-5-8-11-12-14-15-16-17

STRAINER GRIND 3-4

CUSTOMER XXX Reissued to use Tallates

MILL Cowles WT. OR BE 14.3

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
O-132				28.3	(220.0)	
V-855				11.2	(93.0)	
O-286				9.2	(74.0)	
Y-249				6.82)	325.0	
Y-91				3.09)	100.0	
W-208				4.07)	140.0	
W-188				12.90)	303.5	
VM-308				.06)	4.4	
W-218				.18)	2.7	
S-91				.17	(1.35)	
Grind to a 3-4						
O-132				6.3	(49.0)	
S-43				12.0	(78.0)	
S-148				4.5	(30.0)	
VM-432				1.13	(10.7)	
VM-534				.11	(.9)	
YIELD				100.03	1432.5	

Standard Formula. Not to be taken from File.

IS AGITATOR REQUIRED

VISC. F. 82-87 KU TEMP. 80°F

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON. VOL. FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN O.N.

A. D. TO RECOAT IN 72 hrs.

REMARKS:

NV by Wt. 91.7%

NV by Vol. 82.1

PVC 33.1%

FORMULATOR J. E. Southwick

GLD060693

COST	DATE	ANALYSIS	CUSTOMERS
		PIGMENT 61.4 %	Industrial Paint & Wax Paper
		VEHICLE 38.0 %	Ferro
		100.0%	
			12/5/62
		PIGMENT	
		Titanium Dioxide 57.4%	
		Magnesium Silicate 3.5	
		12% Zirconium	Warning No. 14-6 (1964)
		Leaded Zinc Oxide 37.1%	(12/19/62)
		98.0	
			No change in analysis
			Y Enamel List 2-8-63
			Plants # 1-2-4-6-8-12-14-15-16
		VEHICLE	
		Linseed Oil, Alkyd Resin 78.3%	Zier 1-3-64-(fc) 24
		Mineral Spirits & Driers 21.7	
		100.0%	
			#30 (Thermofax) 2-24-66 C

GLIDDEN AND-R PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-H (Linseed)

GOODS Endurance Imperial House Paint - White

LABORATORY NO. [illegible]

CONSISTENCY Gen. Office formula obtained per M. 1-4-63 COST CLASS. [illegible] DATE 12/5/62

FOR USE ON Mfg. at plants #1-2-4-5-8-11-12-14-[illegible]-16-17 STRAINER GRIND 3-4

CUSTOMER Reissued to use tallates & replace S-72 MILL Pebble WT. OR BE 14.3

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-249				(6.82)	325.0	
W-91				(3.09)	100.0	
W-208				(4.07)	140.0	
W-188				(12.90)	303.5	
VM-308				(0.06)	4.4	
W-218) Premix				(0.18)	2.7	
S-91)				0.20	(1.35)	
O-132				34.6	(269.0)	
V-855				11.2	(93.0)	
O-286				9.2	(74.0)	
S-43				12.0	(78.0)	
S-148				4.5	(30.0)	
VM-432				1.13	(10.7)	
VM-534				0.11	(0.9)	
				DISCONTINUED		
				SEE Y-1867-J		
YIELD				100.06	1434.6	

Standard Formula. Not to be taken from file.

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU. 80°F

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON VOL. 91.7% FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN Overnight

A. D. TO RECOAT IN 72 hours

REMARKS:

N.V. by Vol. 82.1%

P.V.C. 33.1%

FORMULATOR J. E. Southwick

GLD060695

	ANALYSIS	CUSTOMER Y-166
	PIGMENT 01.4 %	Endurance Imperial House P
	VEHICLE 38.9 %	White
	100.0%	
		12/5/62
	PIGMENT	
	Titanium Dioxide 27.4%	
	Magnesium Silicate 33.9	
	18% Monoxide	Warning No. 14-62 NPVLA
	Leaded Zinc Oxide 37.1%	(12/19/62)
	100.0%	
		No change in analysis
		Y Enamel Lot 2-8-
		Plant 1-2-4-5-8-12-18-15-14
	VEHICLE	
	Linseed Oil, Alkyd Resin 70.3	2-21 (Jan + Capri)
	Mineral Spirits & Driers 21.7	
	100.0%	Sd. Japan 2-10-6
	Fern 5-5-64 (3)	Mexico 2-21-64
	#30 (Thursday) 2-20-66	Wide Indian 3-3-64
		Huntington 2-9-64
		Manila 3-31-64
	Y-1667	Canadian 4-27-64

GLD060696

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-H
		PIGMENT 61.1 %		Endurance Imperial House Paint - White
		VEHICLE 38.9 %		
		100.0%		
				12/5/62
		PIGMENT		
		Titanium Dioxide	27.4%	
		Magnesium Silicate	35.5	
		18% Nonchasic		Warning No. 14-62 NPVLA
		Leaded Zinc Oxide	37.1%	(12/19/62)
			100.0%	
				No change in analysis
				Y Enamel List 2-8-630
				plants 1-2-4-5-8-12-14-15-16-17
		VEHICLE		
		Linseed Oil, Alkyd Resin	78.3%	#30 (Zinc Naphthenate) 1-3-640
		Mineral Spirits & Driers	21.7	
			100.0%	Leb. Japan 2-10-640
		Peru 5-5-64 (3)		
				Mexico 2-21-640
		#30 (Thinner) 2-24-66		West India 3-3-64
				Guatemala 3-9-640
				Manila 3-31-64
		Y-1867	200	Ecuador 4-27-64 (3)

GLD060697

GLIDDEN 430-N PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1857-B

GOODS: Endurance Imperial House Paint-White — LABORATORY NO.:

CONSISTENCY: Liquid — COST CLASS: — DATE: 2/13/53

FOR USE ON: One Coat House Paint — STRAINER: — GRIND: 3-4

CUSTOMER: — MILL: Pebble — WT. OR BE.: 15

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8			
W-91		2	2			
W-170			14			
W-10		2	8			
W-11		1				
CH-185			1			
O-132	5-1/4					
V-855	1-1/4					
O-286	1/8					
S-148	3/8					
D-15	5/8					
S-14			5 Oz/gal.			
YIELD						

Standard Formula to be taken from file.

IS AGITATOR REQUIRED:

VISC. F. 80-85 KU TEMP. 80°

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. FLASH PT. 100°F

MATCH FOR

REDUCER

AMT. FOR BRUSHING Use Full Body

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN 18 hrs.

A. D. TO RECOAT IN 72 hrs.

REMARKS:

Changed to include more Rutile TiO_2

FORMULATOR Homans

26-8-8

GLD060698

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-B
		PIGMENT 60.7 %		2/13/53
		VEHICLE 39.3 %		Endurance Imperial House Paint
		100.0 %		White
				All Plants - Trial Lot 3-4-53
		PIGMENT		
		35% Leaded Zinc Oxide	46.0%	
		Titanium Oxide	25.0	
		Barium Sulphate	20.8	
		Magnesium Silicate	8.2	
			100.0 %	
		VEHICLE		
		Linseed Oil	71.5%	
		Linseed Alkyd	17.0	
		Mineral Spirits	5.5	
		Liquid Drier	6.0	
			100.0 %	
		Y-1867	352	

GLD060699

GLIDDEN 480-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-B 15

GOODS Endurance Imperial House Paint-White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS. DATE 2/13/63

FOR USE ON One Coat House Paint

STRAINER GRIND 3-4

CUSTOMER

MILL Pebble WT. OR BE 15

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8		440	
W-91		2	2		170	
W-170			14		70	
W-10		2	8		340	
W-11		1			170	
CH-185			1		5	
O-132	5-1/4			5 1/2		
V-855	1-1/4			1 1/2		
O-286	1/2			5		
S-148	3/8			3 3/4		
D-15	5/8			6 1/4		
S-14			5/8 Doz/gal.			50
	Changed to include more Rutile TiO2					
	* REISSUED to correct formula-DESTROY previous copy sent you.					
YIELD						

Standard Formula Not to be taken from File.

IS AGITATOR REQUIRED

VISC. F.B. 80-85 KU TEMP. 80°

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. FLASH PT. 100°F

MATCH FOR

REDUCER

WT. FOR BRUSHING Use Full Body

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN 18 hrs.

A. D. TO RECOAT IN 72 hrs.

REMARKS:

FORMULATOR Romans

25-8-8

GLD060700

GLIDDEN 4602-K PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-C

GOODS Endurance Imperial House Paint-White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS DATE 8/3/53

FOR USE ON One Coat House Paint

STRAINER GRIND 3-4

CUSTOMER

MILL Pebble WT. OR BE 15

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8		440	
W-91		2	2		170	
W-170			14		70	
W-10		2	8		200	
W-188		1			80	
GH-185			1		5	
C-132	6-1/4			62-1/2		
V-855	1-1/4			12-1/2		
D-286	1/2			5		
S-148	3/8			3-3/4		
D-15	5/8			6-1/4		
S-14			5/8 oz/gal.			60
	Changed to use W-188					
YIELD	1.32					

IS AGITATOR REQUIRED

VISC. F.B. 80-85 KU TEMP. 80°

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. FLASH PT. 100°F

MATCH-FOR

REDUCER S-48

AMT. FOR BRUSHING Use Full Body

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN. 18 hrs.

R. U. TO RECOAT IN 72 hrs.

REMARKS

Standard Formula
Not to be taken
from File

FORMULATOR Homans

25-6

GLD060701

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-C
		PIGMENT 60.7 %		Trade Sales - Violet 8-7-63
		VEHICLE 39.3 %		
		100.0 %		
		PIGMENT		
		35% Leaded Zinc Oxide	46.0%	
		Titanium Oxide	25.0	
		Barium Sulphate	20.8	
		Magnesium Silicate	8.2	
			100.0 %	
		VEHICLE		
		Linseed Oil	71.5%	
		Linseed Alkyd	17.0	
		Mineral Spirits	5.5	
		Liquid Drier	6.0	
			100.0 %	

GLD060702

GLIDDEN 440-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-D

GOODS Endurance Imperial House Paint - White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS. DATE **11/12/5

FOR USE ON

STRAINER GRIND 3-4

CUSTOMER

MILL Pebble WT. OR BE 15#

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-8		5	8			
W-91		2	2			
W-170			14			
W-10		2	8			
W-188		2				
VM-308			1			
M-333			3/4			
CH-185			1			
O-132	5-1/4					
V-855	1-1/4					
O-286	1/2					
S-148	7/8					
VM-432	1/8					
S-14			3/4	Add to grind		
VM-155			1/4	Last		
	Formula changed to improve dry.					
YIELD	1.37 Gal.					

Standard Formula Not to be taken from File.

DISCONTINUED 11/1867-E 1-16-57

IS AGITATOR REQUIRED

VISC. F.B. 80-85 KU EMP.

VISC. RED. TEMP.

VISCOSIMETER Krebs Sto

COLOR White SHEEN

NON VOL. FLASH PT.

MATCH FOR Y-1867

REDUCER S-45

ANT. FOR BRUSHING F.B.

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN Overnight

A. D. TO RECOAT IN 72 hrs.

REMARKS:

** Reissued to make a correction. Destroy copy dated 10/21/55.

FORMULATOR Southwick

28-8-E

GLD060703

COST	DATE	ANALYSIS		CUSTOMERS
		PIGMENT 62.0 %		Y-Test T.S. 11-12-5[illegible]
		VEHICLE 38.0 %		
		100.0 %		3 cts (Herzog) (For Cuba) 7-28-[illegible]
				Montreal [illegible] Small (Jor) 6-15-[illegible]
		PIGMENT		Chile 11-28-55
		35% Leaded Zinc Oxide	42.6%	
		Titanium Oxide	23.0	Peru 3-29-56
		Barium Sulphate	19.1	Bradley (Chile) 5-16-56
		Magnesium Silicate	15.3	Columbia 7-10-56
			100.0 %	
		VEHICLE		
		Linseed Oil	71.55%	
		Linseed Alkyd	17.00	
		Mineral Spirits	9.30	
		Liquid Drier	2.15	
			100.00 %	
		PVC = 28.9%		
		Y-1867	3501	

GLD060704

BLIDDER 480-K PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-D

GOODS Enduranes Imperial House Paint - White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS. DATE 10/21/53 Void

FOR USE ON

STRAINER GRIND 3-4

CUSTOMER

MILL Pebble WT. OR BE 15#

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8			
W-91		2	2			
W-170			14			
W-10		2	8			
W-188		2				
VM-308			1			
M-333			3/4			
CH-185			1			
O-132	5-1/4					
V-855	1-1/4					
O-286	1/2					
S-148	7/8					
VM-423	1/8					
S-14			3/4	Add to grind.		
VM-433			1/4	Lbs.		
	Formula changed to improve dry.					
YIELD	1.37 Gal.					

Standard Formula. Not to be taken from File.

IS AGITATOR REQUIRED

VISC. F.B. 80-85 KU TEMP. 80°

VISC. RED. TEMP.

VISCOSIMETER Krebs Stormer

COLOR White SHEEN

NON VOL. FLASH PT. 100°F

MATCH FOR Y-1867

REDUCER S-43

AMT. FOR BRUSHING FB

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN Overnight

A. O. TO RECOAT IN 72 hrs.

REMARKS:

FORMULATOR Southwick

28-8-8

GLD060705

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-D
		PIGMENT 62.0 %		10/21/53
		VEHICLE 38.0 %		Endurance Imperial House Paint
		100.0 %		White
				All Plants - Y-Lot 11-3-5
		PIGMENT		
		35% Leaded Zinc Oxide	42.6%	
		Titanium Oxide	23.0	
		Barium Sulphate	19.1	
		Magnesium Silicate	15.3	
			100.0 %	
		VEHICLE		
		Linseed Oil	71.55%	
		Linseed Alkyd	17.00	
		Mineral Spirits	8.30	
		Liquid Drier	3.15	
			100.00 %	
		Y-1867	3501	

GLD060706

GLIDDEN 480-M PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-E

GOODS Endurance Imperial House Paint- White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS

DATE 1/16/57

FOR USE ON

STRAINER

GRIND 3-4

CUSTOMER

MILL Pebble

WT. OR BE 14.6

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8		405	
W-91		1	7-1/2		108	
W-170		1	7-1/2		108	
W-188		3	8		260	
W-218			3/4		3	8
VM-308			1		4	8
O-132	3-7/8			35-1/2		
V-855	1-1/4			11-1/2		
O-286	1			9-1/4		
S-43	1-3/8			12-1/2		
S-148	1/2			4-1/2		
VM-432			2	1-1/8		
VM-433			1/4			10 Loz
APA Advance Puffing			1/4 Loz. (Hold)			
Agent for viscosity						
YIELD	1.36			100		

Standard Formula. Not to be taken from File

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU TEMP.

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. 92% FLASH PT.

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN Overnight

A.D. TO RECOAT IN 72 hrs.

CA~~XXXXX~~ PVC 32.5

AMT. OF CATALYST

POT LIFE TEMP.

STABILITY AT 200°F.

STABILITY AT 135°F.

ST~~XXXXXXXXXXXX~~ Changed for

REMARKS less chalking & wrinkling

FORMULATOR J. Southwick

OK PCH 28-8-8

GLD060707

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-E
		PIGMENT 60.5 %		Endurance Imperial House Paint
		VEHICLE 39.5 %		White
		100.0%		1/16/57
		PIGMENT		(Y) Trade Sales List 1-22-5
		35% Leaded Zinc Oxide	46.0%	
		Titanium Dioxide	24.3	Eurodor 2-19-57
		Magnesium Silicate	29.7	
			100.0	Joe Pierson 2-27-57
				Bradley 4-12-57
				Dreed 7-15-57
				Portland via S. Fran 6-17-5
		VEHICLE		Chile 10-16-58
		Linseed Oil	60.4%	West Indies 11-24-
		Linseed Alkyd	18.4	
		Mineral Spirits & Driers	21.2	Zuc 12-30-58
			100.0%	
				Guatemala 8-24-0
		Y-1867 751		

GLD060708

GLIDDEN 480-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-E

GOODS Endurance Imperial House Paint - White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS. DATE 8/26/59*

FOR USE ON No 4 Label Warning

STRAINER GRIND 3-4

CUSTOMER More than 1% Lead

Standard Formula. Not to be taken from file

MILL Pebble WT. OR BE 14.6

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-6		5	8		405	
W-91		1	7-1/2		108	
W-208		1	7-1/2		108	
W-188		3	8		260	
W-218			3/4		3	8
VM-308			1		4	8
C-132	3-7/8			35-1/2		
V-855	1-1/4			11-1/2		
O-286	1			9-1/4		
S-43	1-3/8			12-1/2		
S-148	1/2			4-1/2		
VM-432			2	1-1/8		
VM-433			1/4			19 Loz.
AMPA Advance Puffing			1/4 Loz. (Hold)			
Agent for viscosity.						
YYIELD	1.36			100		

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU TEMP.

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. 92% FLASH PT.

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN Overnight

A. D. TO RECOAT IN 72 hrs.

REMARKS: PVC 32.5

Changed for less chalking & wrinkling.

** Reissued to use Glidden W-208.

FORMULATOR J. Southwick

GLD060709

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-E
		PIGMENT 60.5 %		Professional Endurance Imperial
		VEHICLE 39.5 %		One Coat Alkyd-Fortified
		100.0%		#1867 Outside White
				8/26/59
		PIGMENT		No. of Label Warning
		35% Leaded Zinc Oxide	46.0%	No. ~~8~~ Label Warning
		Titanium Dioxide	24.3	
		Magnesium Silicate	29.7	No change in analysis.
			100.0%	
				Y Enamel List 8-26-5
				Keating - Tulsa "
				March - Portland "
				Chile 8-31-59
				Ecuador 8-31-59
		VEHICLE		Guatemala 8-31-59
		Linseed Oil	60.4%	Peru 8-31-59
		Linseed Alkyd	18.4	West Indies 8-31-59
		Mineral Spirits & Driers	21.2	Paul Hawkins 7-19-60
			100.0%	
				J. Kuhn (C) 8-26-6
				GP Mexico 9-16-60
		Y-1867 751		

GLD060710

GLIDDEN-ABOH PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. Y-1867-F

GOODS: Endurance Imperial House Paint-White

LABORATORY NO.

CONSISTENCY DISCONTINUED

DATE 6/1/61

FOR USE ON

COST CLASS.

STRAINER

GRIND 3-4

CUSTOMER More than 1% Lead SFF Y-1867-A

MILL Pebble

WT. OR BE 14.6

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-35				(6.05)	285.0	
W-1				(2.07)	110.0	
W-91				(3.25)	105.2	
W-208				(3.05)	105.2	
W-188				(12.70)	302.0	
VM-308				(0.06)	4.4	
W-218 } Pre-Mix				(0.18)	2.7	
S-72 }				0.17	(1.1)	
O-132				34.6	(269)	
V-855				11.2	(93)	
O-286				9.1	(74)	
S-43				12.0	(78)	
S-148				4.4	(30)	
VM-432				1.12	(10.7)	
VM-433				.14	(.9)	
**DO NOT MFG. ON COWLES, SEE SPECIAL FORMULA						
YIELD				100.09	1471.2	

Standard Formula not to be taken from File

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU TEMP.

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

NON VOL. FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN O.N.

A. D. TO RECOAT IN 72 hrs.

REMARKS Changed to lower cost with W-35.

91.8% NV by wt.

82.2% NV by Vol.

33.3% PVC

FORMULATOR J.E. Southwick

GLD060711

COST	DATE	ANALYSIS	CUSTOMERS
		PIGMENT 62.3 %	Y-1867-F
		VEHICLE 37.7 %	Endurance Imperial House Paint
		100.0%	White
			6/1/61
		PIGMENT	
		Titanium Dioxide 23.4%	
		35% Leaded Zinc Oxide 43.6	No. 4 Label Warning
		Magnesium Silicate 33.0	
		100.0%	# Y-Enamel Lot (6-9-61
			Plant # 1-2-4-5-12-14-8-11 & 17
			Marchi (#15) 6-9-61
		VEHICLE	Keating (#7) 6-9-61
		Linseed Oil, Alkyd Resin 78.3%	
		Mineral Spirits & Driers 21.7	Ecuador 6-22-61
		100.0%	
			Hess (#16) 9-19-61 ①
			Sek. Japan 3-16-62 ①
		Y-1867 166	

GLD060712

GLIDDEN RED-H PRINTED IN U.S.A. FRONT

FORMULA RECORD

GOODS	Endurance Imperial House Paint - White BASE	FORMULA NO.	Y-1867-F(Cowles
CONSISTENCY		LABORATORY NO.	Morehouse)
FOR USE ON	Xtra Copies	COST CLASS.	DATE 5/3/61
CUSTOMER	More than 1% Lead See attached Pebble formula	STRAINER	GRIND 3-4
		MILL Cowles	WT. OR BE 14.6

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
Add material in order listed:						
V-855				11.2	(90.0)	
O-286				9.1	(75.0)	
O-132				25.0	(194.4)	
W-188				(12.7)	302.0	
W-218				(0.23)	3.4	
W-208				(3.05)	105.2	
W-91				(3.25)	105.2	
W-35				(6.05)	285.0	
W-1				(2.07)	110.0	
VM-308				(.06)	4.4	
Disperse to a 3-4 grind* and add:						
O-132				9.6	(74.6)	
S-72				0.20	(1.3)	
Morehouse to a clean 3-4 grind:						
S-43				12.0	(79.0)	
S-148				4.3	(30.0)	
VM-432				1.12	(10.7)	
VM-433				0.14	(0.9)	
*Will be dirty						
YIELD				100.07	1471.1	

Standard Formula, Not to be taken from File.

DISCONTINUED SEE Y-1867-F

IS AGITATOR REQUIRED	
VISC.F.B. 82-87 KU	TEMP.
VISC. RED.	TEMP.
VISCOSIMETER Stormer	
COLOR	SHEEN
NON VOL.	FLASH PT.
MATCH FOR	
REDUCER S-43	
AMT. FOR BRUSHING As needed	
SPRAYING	TUMBLING
DIPPING	DRIP TIME
BAKE	TEMP.
AIR DRIES IN Overnight	
A. D. TO RECOAT IN 72 hrs.	
REMARKS: 72.6% Mill Base 91.7% NV by wt. 82.3% NV by vol. 33.3% PVC	
FORMULATOR J.E. Southwick	

GLD060713

GLIDDEN 4000-M PRINTED IN U.S.A. PAINT

FORMULA RECORD

FORMULA NO. Y-1857-0 Base

GOODS Endurance Imperial House Paint - White

LABORATORY NO.

CONSISTENCY Liquid

COST CLASS. DATE 6/21/62

FOR USE ON Mfg. at plants #1-2-4-5-8-11-12-14-15-16-17

STRAINER GRIND 3-4

CUSTOMER More than 1% Lead Kitsap Paint

MILL Pebble WT. OR BE 14.3#

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
W-249				(6.82)	325.0	
W-91				(3.09)	100.0	
W-208				(4.07)	140.0	
W-188				(12.90)	303.5	6
VM-308				(0.06)	4.4	11
W-218 } Premix				(0.18)	2.7	
S-72 }				0.17	(1.1)	
O-132				34.6	(269.0)	
V-855				11.2	(93.0)	
O-286				9.2	(74.0)	
S-43				12.0	(78.0)	
S-148				4.5	(30.0)	6
VM-432				1.13	(10.7)	10
VM-433				0.11	(0.9)	
YIELD				100.03	1432.3	

Standard formula Not to be taken from file.

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU@ 80°F TEMP.

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON VOL. 91.7% FLASH PT. 100°F

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN O.N.

R. TO RECOAT IN 72 hours

REMARKS: Changed to use W-24 & for increased hiding.

N.V. by Vol. - 82.1%

P.V.C. - 33.1%

FORMULATOR J. E. Southwick

GLD060714

COST	DATE	ANALYSIS		CUSTOMERS Y-1867-G
		PIGMENT 61.1 %		Endurance Imperial House Paint - White
		VEHICLE 38.9 %		
		100.0%		
				6/21/62
		PIGMENT		
		Titanium Dioxide	27.4%	No. 4 Label Warning
		Magnesium Silicate	35.5	
		18% Monobasic		#1 Enamel List 6-26-62
		Leaded Zinc Oxide	37.1%	Plants
			100.0%	#1-2-4-5-8-11-12-14-15-16-17
				Mexico 6-27-62
		VEHICLE		
		Linseed Oil, Alkyd Resin	78.3%	
		Mineral Spirits & Driers	21.7	
			100.0%	
		Y-1867	266	

GLD060715

SHERWIN-WILLIAMS 480-K PRINTED IN U.S.A. FRONT

FORMULA RECORD

FORMULA NO. V-1867-0 (Cowles

GOODS Endurance Imperial House Paint - White

LABORATORY NO. BASE Morehou

CONSISTENCY X Tim Cowles

COST CLASS. DATE 8/20/62

FOR USE ON Mfg. at plants #1-2-4-5-8-12-14-16-17-15

STRAINER GRIND 3-4

CUSTOMER More than 1% Lead See attached Pebbly Mill

MILL Cowles WT. OR BE 14.3

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
O-132				26.3	(220.0)	
V-855				11.2	(93.0)	
O-286				9.2	(74.0)	
W-249				(6.82)	325.0	
W-91				(3.09)	100.0	
W-208				(4.07)	140.0	
W-188				(12.90)	303.5	
VM-308				(.06)	4.4	
W-218				(.18)	2.7	
S-91				.17	(1.35)	
Grind to a 3-4						
O-132				6.3	(49.0)	
S-43				12.0	(78.0)	
S-14R				[illegible]	[illegible]	
VM-432				1.13	(10.7)	
~~VM-433~~				.11	(.9)	
VM-534						
YYIELD				100.03	1432.5	

Standard formula not to be taken from Pebbly Mill

IS AGITATOR REQUIRED

VISC. F.B. 82-87 KU TEMP. 80°F

VISC. RED. TEMP.

VISCOSIMETER Stormer

COLOR White SHEEN

NON VOL. FLASH PT. 100°

MATCH FOR

REDUCER S-43

AMT. FOR BRUSHING As needed

SPRAYING TUMBLING

DIPPING DRIP TIME

BAKE TEMP.

AIR DRIES IN ON

A. D. TO RECOAT IN 72 hrs.

REMARKS:

NV by wt 91.7%

NV by Vol. 82.1

PVC 33.1%

FORMULATOR J. E. Southwick

GLD060716

COST	DATE	ANALYSIS		CUSTOMERS
		PIGMENT 61.1 %		Y-1867-G
		VEHICLE 38.9 %		Endurance Imperial House Paint
		100.0%		White
				8/20/62
		PIGMENT		Warning No 14-62 NPVLA
		Titanium Dioxide	27.4%	No 4 Label Warning (12-19-6
		Magnesium Silicate	35.5%	
		18% Monobasic -		
		Leaded Zinc Oxide	37.1%	Y Enamel Lot 8-30-62
			100.0%	Blend #1-2-4-5-8-11-12-14-15-16-1
		VEHICLE		
		Linseed Oil, Alkyd Resin	78.3%	
		Mineral Spirits & Driers	21.7	
			100.0%	
		Y-1867	266	

GLD060717

C&R FORMULA
Glidden Form 1109-1 Printed in U.S.A. 9/65

Product	Endurance Imperial House Paint	Formula Number	Y-1867-J
Customer	Mfg. plants #8-12-15 Only -#1 (Pad)	Laboratory Number	(Temporary)

CODE NUMBER	100 GALLON BATCH GALLONS	100 GALLON BATCH POUNDS	% BY WEIGHT	MANUFACTURING INSTRUCTIONS
W-280	5.22	170.0		
W-290	2.61	90.0		
W-294	5.88	275.0		
W-104	0.63	36.0		
W-188	12.86	303.0		
W-218	0.23	3.5		Premix and add
S-91	0.25	1.8		immediately to mill.
O-132	34.60	269.0		
V-855	11.20	93.0		
O-286	9.20	74.0		
S-43	11.70	76.0		
S-148	4.50	30.0		
VM-432	1.13	10.7		
VM-534	0.11	0.9		
Yield	100.12	1432.9		

R.M. Cost	Morehouse	Date	7/11/66
Mill	Pebble or	Grind	3-4
% Lead	More than 1%		
Wt./Gal.	14.2	Method	
Flash Pt. °F.		Method	
N.V. Wt.		Method	
N.V. Vol.		Method	
Visc. F.B.	82-87	Method	
Visc. Red.		Method	
Reducer		Ratio	
P.V.C.		pH	
Color		Match	
Gloss	70 min.	Method	
Strainer			
Container			
Label Warning	#14-62 NPUTA		
Application	Brush		
Cure	Overnight Recoat: 72 hours.		
Remarks	To use up stocks of W-104 only.		
Formulator	Green/Southwick		
Approved by	S. Bowell		

Stamp: Not to be [illegible] from File.

GLD060718

CLASS					
CODES					

DESCRIPTORS (20 spaces – limit)

Trade Name Customer

Substrate and Treatment

End Use

Specifications

Royalty Yes ☐ No ☐ Silicone Yes ☐ No ☐

Resins

Color Gloss

For Use On

Resistance

Manufactured at Plants

ANALYSIS

Pigment %

Vehicle %

Pigment

Vehicle

Y Paint Test 7-12-66

#30 (except #30-coat-Back-)

#8-12-15 7-12-66

#1 (Primer) 7-25-66

Glidden Form 1109-1 (back) Printed in U.S.A. 9/65

GLD060719

C&R FORMULA
Glidden Form 1109-1 Printed in U.S.A. 9/65

Product: ENDURANCE IMPERIAL HOUSE PAINT

Customer:

CODE NUMBER	100 GALLON BATCH GALLONS	100 GALLON BATCH POUNDS	% BY WEIGHT	MANUFACTURING INSTRUCTIONS
W-280	5.22	170.0		
W-290	2.61	90.0		
W-35	6.50	305.0		
W-188	12.86	303.0		
W-218	0.23	3.5		Pre-mix and add
S-91	0.25	1.8		immediately to
				mill.
O-132	34.60	269.0		
V-855	11.20	93.0		
O-286	9.20	74.0		
S-43	11.70	76.0		
S-148	4.50	30.0		
VM-432	1.13	10.7		
VM-534	0.11	0.9		
Yield	100.11	1426.9		

Standard Formula, Not to be taken from File.

Formula Number: Y-1867-J
Laboratory Number:
R.H.Gas: ~~Xxxxx~~ Pebble Date: 5/5/66
Mill: Morehouse Grind: 3-4
% Lead: More than 1%
Wt./Gal.: 14.2 Method: 5-A-1
Flash Pt. °F.: 100°F Method:
N.V. Wt.: 91.6% Method:
N.V. Vol.: 82.4% Method:
Visc. F.B.: 82-87 KU Method: 4-C-1
Visc. Red.: Method:
Reducer: S-43 Ratio:
P.V.C.: 33.2 pH:
Color: White Match:
Glass: 70 Min. Method: 9-A-1
Strainer:
Container:
Label Warning: #14-62 NPVLA
Application: Brush
Cure: Overnight
Recoat: 72 hours.
Remarks:
Formulator: Green/Southwick
Approved by: S.T. Bowell

GLD060720

CLASS					
CODES					

DESCRIPTORS (20 spaces – limit)

Trade Name Endurance House Pt Customer

Substrate and Treatment

End Use

Specifications

Royalty Yes [ ] No [X] Silicone Yes [ ] No [X]

Resins Linseed Alkyd Resin

Color White Gloss 70 Min.

For Use On

Resistance

Manufactured at Plants #1-2-4-5-8-12-14-16-17

License "A" List 6-30-66 (80)

Costa Rica 9-2-66 (5)

5/5/66 ANALYSIS Y-1867-J

Pigment 61.0 %

Vehicle 39.0 %

100.0%

Pigment

Titanium Dioxide	29.9
12% Leaded Zinc	35.0
Magnesium Silicate	35.1
	100.0

Vehicle

Linseed Alkyd Resin	78.
Mineral Spirits & Driers	21.

Warning #14-62 NPVLA

Y Paint List 5-12-66
#1-2-4-5-8-12-14-16-17

Stamped Tedlin 5-12-66
#11-15

Y-1867 665

Glidden Form 1109-1 (back) Printed in U.S.A. 9/65

GLD060721

Glidden Form 1109-1 Printed in U.S.A. 4/66

C & R FORMULA

Product Endurance Imperial House Paint

Customer

CODE NUMBER	100 GALLON BATCH GALLONS	100 GALLON BATCH POUNDS	% BY WEIGHT	MANUFACTURING INSTRUCTIONS
W-625	5.22	170.0	DISCONTINUED	
W-830	2.61	90.0		REPLACED WITH
W-452	6.50	305.0	SEE	Y-1800G
W-439	12.86	303.0		
E-118)	0.23	3.5)	Premix and add	
S-213)	0.25	1.8)	immediately to mill.	
G-123	34.60	269.0		
W-2197	11.20	93.0		
G-131	9.20	74.0		
S-330	11.70	76.0		
S-348	4.50	30.0		
E-342	1.13	10.7		
E-324	0.11	0.9		
Yield:	100.11	1426.9		

Standard Formula Not to be taken from File.

Formula Number Y-1867-J BASE

Laboratory Number

R.M. Cost Date 3/1/67

Mill PEBL/MHSE Grind 3-4

NPVLA %Lead 1 plus

		METHOD
Label Warning	14-62	
Wt./Gal.	14.2#	5-A-1
Flash Pt.	°100°	
N.V.Wt.	91.6%	
N.V.Vol.	82.4%	
Visc. F.B.	82-87 KU	4-C-1
Visc. Red.		
Reducer	S-330	Ratio
P.V.C.	33.2%	pH
Color	White	Match
Gloss	70 min.	Method 9-A-1
Strainer		
Container		
Application	Brush	
Cure	Air Dry: Overnight Recoat: 72 hrs.	
Remarks		
Formulator	Green/Southwick	
Approved by	Bowell	

GLD060722

Glidden Form 1109-1 (back) Printed in U.S.A. 4/65 — C & R FORMULA

CLASS					
CODES					

DESCRIPTORS (20 spaces-limit)

Trade Name — Customer

Substrate and Treatment

End Use

Specifications

Royalty Yes ☐ No ☒ Silicone Yes ☐ No ☒

Resins Linseed Alkyd Resin

Color White Gloss 70 min.

For Use On

Resistance #30 1-4-67

Manufactured at Plant #1-2-4-5-6-12-14-16-17 2-16-67

Stamped:

#11-14 2-16-67

Manufacturing Instructions or Remarks

Stamped:

#6 5-10-67 mk

Date 3/1/67 Formula No. Y-1867-J

Product Endurance Imperial House Paint - White

Label Warning #18-62 NEMA

ANALYSIS

Pigment 61	%
Vehicle 39	%
100%	

Pigment

Titanium Dioxide	29.9%
12% Leaded Zinc	35.0
Magnesium Silicate	35.1
	100.0%

Vehicle

Linseed Alkyd Resin	78.6%
Mineral Spirits & Driers	21.4
	100.0%

NO CHANGE IN ANALYSIS

Y-1867 665

GLD060723

Glidden Form 1109-1 Printed in U.S.A. 2/67 C & R FORMULA

Product Endurance Imperial House Paint

Customer

CODE NUMBER	100 GALLON BATCH GALLONS	100 GALLON BATCH POUNDS	% BY WEIGHT	MANUFACTURING INSTRUCTIONS
				DISCONTINUED: REPLACED WITH Y-1800-G
				Per TWSteppart
Yield				

Standard Formula. Not to be taken from File.

Formula Number	Y-1867-J
Laboratory Number	
R.M. Cost	Date 4/5/67
Mill	Grind
NPVLA	%Lead
Label Warning	METHOD
Wt./Gal.	
Flash Pt. °F.	
N.V.Wt.	
N.V.Vol.	
Visc. F.B.	
Visc. Rad.	
Reducer	Ratio
P.V.C.	pH
Color	Match
Gloss	Method
Strainer	
Container	
Application	
AD/Bake	
Recoat Time	
Remarks	
Formulator	
Approved by	

GLD060724

Glidden Form 1109-1 (Back) Printed in U.S.A. 2/62 — C & R FORMULA

CLASS						
CODES						

DESCRIPTORS (20 spaces—limit)

Trade Name — Customer

Substrate and Treatment

End Use

Specifications

Royalty Yes ☐ No ☐ Silicone Yes ☐ No ☐

Resins

Color — Gloss

For Use On

Resistance

Manufactured at Plants

Manufacturing Instructions or Remarks

Date — Formula No.

Product

Label Warning

ANALYSIS

Pigment %

Vehicle %

Pigment

Y Pt. Test 6-8-64
#1-2-4-5-8-11-12-
14-15-16-17-18

Vehicle

GLD060725

FORMULA RECORD

FORMULA NO. V-1867-F(Soo

GOODS: Endurance Imperial House Paint - White 35[illegible]

INFORMATION NO. Morehouse

POST CLASS.

DATE 5/3/6

FOR USE

CUSTOMER

GRIND 3-

More than 1% Lead See attached [illegible]

W.H. Cowles

WT. OR DIE

COOL. NUMBER	THE GALLON MATCH PINTS	LBS.	OZS.	LARGE MATCH GALS.	LBS.	OZS.
Add material in order listed:						
V-[illegible]				11.2	(90.0)	
C-[illegible]-285				9.1	(75.0)	
C-[illegible]-132				25.0	(194.4)	
[illegible]-108				(12.7)	302.0	
[illegible]-218				(0.23)	3.4	
[illegible]-208				(3.05)	105.2	
[illegible]-91				(3.25)	105.2	
[illegible]-35				(6.05)	265.0	
[illegible]-1				(2.07)	110.0	
VR-308				(.06)	4.4	
Disperse to a 3-4 grind and add:						
O-132				9.6	(74.6)	
S-72				0.20	(1.3)	
Morehouse to a clean 3-4 grind:						
S-43				12.0	(79.0)	
S-148				4.3	(30.0)	
VR-432				1.12	(10.7)	
VR-433				0.14	(0.9)	
Will be dirty						
YIELD				100.07	1471.1	

Standard Formula Not to be taken from file

DISCONTINUED

AG AGITATION REQUIRED

VISC. F.B. 82-87 Kuhn.

VISC. NEG. TEMP.

VISCOSIMETER Stormer

COLOR SHEEN

HOLD VOL. CLEAN FT.

MATCH FOR

PRO COP S-43

APP. FOR BRUSHING As needed

SPRAYING TUBERING

DIPPING DRIP TIME

DRY TEMP.

FOR DRIFT IN Overnight

S.D. TO RECOAT IN 72 Tons

REMARKS

72.6% Mill Base

91.7% NV by wt.

82.3% NV by vol.

33.3% PVC

Author J.E. Southwick

GLD060726

GLIDDEN 440-N PRINTED IN U.S.A. FRONT

FORMULA RECORD

GOODS	Endurance Imperial House Paint - White BASE	FORMULA NO.	V-1867-F(Cowles-Morehouse)
CONSISTENCY		LABORATORY NO.	
FOR USE ON	Xtra Copies	COST-CLASS.	DATE 5/3/61
CUSTOMER	More than 1% Lead See attached Pebble formula	STRAINER	GRIND 3-4
		MILL Cowles	WT. OR BE 14.6#

CODE NUMBER	ONE GALLON BATCH PINTS	LBS.	OZS.	LARGE BATCH GALS.	LBS.	OZS.
Add material in order listed:						
V-855				11.2	(90.0)	
O-286				9.1	(75.0)	
O-132				25.0	(194.4)	
W-188				(12.7)	302.0	
W-218				(0.23)	3.4	
W-208				(3.05)	105.2	
W-91				(3.25)	105.2	
W-35				(6.05)	285.0	
W-1				(2.07)	110.0	
VM-308				(.06)	4.4	
Disperse to a 3-4 grind* and add:						
O-132				9.6	(74.6)	
S-72				0.20	(1.3)	
Morehouse to a clean 3-4 grind:						
S-43				12.0	(79.0)	
S-148				4.3	(30.0)	
VM-432				1.12	(10.7)	
VM-433				0.14	(0.9)	
*Will be dirty						
YIELD				100.07	1471.1	

Standard Formula, Not to be taken from File.

DISCONTINUED SEE V-1867-F

IS AGITATOR REQUIRED	
VISC.F.B. 82-87 KU	TEMP.
VISC. RED.	TEMP.
VISCOSIMETER Stormer	
COLOR	SHEEN
NON VOL.	FLASH PT.
MATCH FOR	
REDUCER S-43	
AMT. FOR BRUSHING As needed	
SPRAYING	TUMBLING
DIPPING	DRIP TIME
BAKE	TEMP.
AIR DRIES IN Overnight	
W.O. TO RECOAT IN 72 hrs.	
REMARKS:	
72.6% Mill Base	
91.7% NV by wt.	
82.3% NV by vol.	
33.3% PVC	
FORMULATOR J.E. Southwick	

GLD060727

COST	DATE	ANALYSIS	CUSTOMERS
		PIGMENT %	Hess (Texas) 9-18-61 O
		VEHICLE %	
		PIGMENT	
			Gn. Y Enamel List 9-26-61 O
			Plants #1-2-4-5-8-12-14-17
		VEHICLE	

GLD060728