



# **Product Training**

## **VOLUME 2**

**[Revised May 1963]**

MATERIALS AND PROPS

SECTION II

PART I

EXTERIOR OIL PAINTS

Following materials and props will be needed to conduct your demonstration of products listed on the following pages:

1. Endurance Exterior Basecoat Y-1851

- (a) Wet Sample
- (b) Several pieces of siding
- (c) Brushes
- (d) Mineral Spirits

2. Endurance House Paint

- (a) Wet Sample
- (b) Several pieces of siding that have been primed with 1851
- (c) Brushes
- (d) Mineral Spirits

3. Endurance Imperial Y-1867

- (a) Wet Sample
- (b) Several pieces of siding that have been primed with Y-1851
- (c) Brushes
- (d) Mineral Spirits

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4. Endurance Mildew & Fume Resistant Paint Y-1850

- (a) Wet Sample
- (b) Several pieces of siding that have been primed with Y-1851
- (c) Brushes
- (d) Mineral Spirits

5. Endurance Velvet Y-2750

- (a) Wet Sample
- (b) Brushes
- (c) Several pieces of siding that have been primed with Y-1851
- (d) Mineral Spirits

6. Endurance Non-Chalking White Y-1892

- (a) Wet Sample
- (b) Brushes
- (c) Several pieces of siding that have been primed with Y-1851
- (d) Mineral Spirits

7. Professional House Paint Primer No. 51 Y-5051

- (a) Wet Sample
- (b) Brushes
- (c) Several pieces of siding
- (d) Mineral Spirits

## SECTION II

### PART I

#### EXTERIOR OIL PAINTS

This portion of your schooling is devoted to discussions and demonstrations of all of our products intended for exterior application. It includes both solvent-thinned and latex types of primers, house paints, masonry paints, metal protective paints, aluminum paints and some special coatings.

Exterior paints usually differ from interior paints in one major respect -- elasticity. Interior types must be comparatively harder to provide the best wearing properties. Conversely, exterior paints must be tough but leather-like in structure.

As such, they are able to expand and contract, thus adjusting to the actual movement of any surface. Surface movement may occur when wood either absorbs moisture or is in the process of drying out, or when quick changes in temperature cause expansion or contraction of metal, known as "thermal shock." Paints that are too hard crack and lose adhesion where such movement occurs.

Another major difference exists in the fact that exterior paints must be "self-cleaning", and are therefore, formulated to dispel accumulated soil by actually releasing pigment very slowly. This action is called "chalking." It is carefully controlled by proper formulation to prevent a premature loss of protective qualities or loss of color.

A. ENDURANCE EXTERIOR BASECOAT Y-1851 (PRIMER-SEALER)

Endurance Exterior Basecoat should be used to first coat exterior surfaces, such as new wood, previously painted wood that is badly weathered or chalking and to spot-prime bare spots resulting from peeling, flaking or scraping previously applied coatings.

Endurance Exterior Basecoat is a specially formulated, ready-mixed house paint primer, containing scientifically balanced oil and pigment combinations that provide the excellent performance characteristics such as --

1. The ability to develop and maintain good adhesion to the surface and top coats.
2. The retention of sufficient elasticity after application to expand and contract with continual dimensional changes in the surface due to moisture and weather variations.
3. Sufficient hardness to be compatible with various types of paint top coats.
4. The ability to seal and form a uniform and non-absorbent film over most all surface problems as noted above.
5. Sufficient hiding to give a good finished appearance with only one top coat.
6. The ability to resist failure when exposed un-top coated, assuring better finishing conditions after reasonable periods of exposure.

APPLICATION -- Brush or Spray

REDUCER -- Mineral Spirits or Turpentine

DRYING TIME -- 18 to 24 hours; 48 hours for recoating

COVERAGE -- Up to 600 square feet per gallon

## SPECIFICATION NO. 1851

## EXTERIOR PRIMER (UNDERCOAT FOR WOOD), WHITE

This specification covers a ready-mixed priming paint for previously unpainted exterior wood surfaces or for exterior surfaces previously painted with house paint. It shall be of one type.

It shall meet the following requirements:

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 60.0%   | 62.0%   |
| % Vehicle                 | 38.0%   | 40.0%   |
| Solids by Volume          | 70.3%   | 71.3%   |

## PIGMENT

|                            |       |       |
|----------------------------|-------|-------|
| *Titanium Oxide            | 15.0% | 16.5% |
| Basic Carbonate White Lead | 31.0% | 33.0% |
| Barium Sulphate            | 10.0% | 12.0% |
| Magnesium Silicate         | 40.0% | 41.5% |

\*Rutile Non-Chalking Type

## VEHICLE

|                            |       |       |
|----------------------------|-------|-------|
| Tung & Linseed Oils, Rosin | 62.0% | 64.0% |
| Mineral Spirits            | 36.0% | 38.0% |

## QUALITATIVE REQUIREMENTS

|                                                             |         |         |
|-------------------------------------------------------------|---------|---------|
| Weight of one gallon of paint                               | 14.0    | ---     |
| Water, percent by weight                                    | ---     | 1.0%    |
| Coarse particles (residue retained on a 325 standard sieve) | ---     | 2.0%    |
| Consistency, Krebs-Stormer                                  | 77.0 KU | 82.0 KU |
| Drying Time - Set-to-touch, hours                           | ---     | 8       |
| Firm film for recoating, hours                              | ---     | 48      |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be caked, settled or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

#### WORKING PROPERTIES

The paint shall brush easily at package consistency and shall permit lapping without difficulty for a minimum of seven minutes.

#### SEALING PROPERTIES

Brush a film of the paint at a spreading rate of 450 square feet per gallon uniformly over most of the surface of a western red cedar panel cut from lumber of the quality known as Grade A Select. The panel shall not be less than 5 x 18 inches in size. Brush the paint with a 1-1/2 inch brush over an area of 5" x 16", leaving an area 5" x 2" at one end of the panel uncoated. Allow to dry for 48 hours; then cover the entire area with one uniform coat of tinted semi-gloss test paint, applied at the rate of 600 square feet per gallon. Allow to dry for 72 hours and then examine to determine whether the dried film applied over the primer presents a substantially uniform, semi-gloss appearance in contrast to that portion applied over the bare wood at one end of the panel.

#### B. ENDURANCE HOUSE PAINT, Y-1800

Endurance House Paint is scientifically formulated with the correct balance of ingredients and the choice of ingredients which gives the maximum desirable characteristics such as durability, freedom from dirt collection, self-cleaning properties, good color retention and easy application properties.

Endurance House Paint contains more heavy-bodied, pure linseed oil per gallon than the average house paint, which gives it longer life;

pure white lead for added strength, water-resistance and extra durability; titanium for whiteness and hiding; zinc oxide to combat mildew; magnesium silicate for protection against cracking and checking.

#### Feature Points

- |                  |                                       |
|------------------|---------------------------------------|
| 1. Self cleaning | 4. Good elasticity                    |
| 2. Easy brushing | 5. Good tinting with Dramatone colors |
| 3. High hiding   | 6. Controlled chalking                |

APPLICATION -- Brush, Spray, Roller

DRYING TIME -- 12 hours, recoat in 48 hours

THINNER -- Mineral Spirits or Turpentine

COVERAGE -- 550 square feet per gallon

#### SPECIFICATION NO. 1800

#### EXTERIOR HOUSE PAINT WHITE

This paint is used where a high quality ready-mixed exterior oil paint is specified for wood, masonry or metal surfaces. It shall be a white lead, zinc oxide, titanium oxide, extender paint.

It shall meet the following composition requirements:

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 61.5%   | 63.0%   |
| % Vehicle                 | 37.0%   | 38.5%   |
| Solids by Volume          | 82.2%   | ---     |

| PIGMENT COMPOSITION      | MINIMUM | MAXIMUM |
|--------------------------|---------|---------|
| Titanium Oxide (Anatase) | 10.0%   | 11.0%   |
| Titanium Oxide (Rutile)  | 6.0%    | 7.0%    |
| 18% Leaded Zinc Oxide    | 44.0%   | 45.0%   |
| Magnesium Silicate       | 37.0%   | 40.0%   |

#### VEHICLE COMPOSITION

|                          |       |       |
|--------------------------|-------|-------|
| Linseed Oil              | 52.0% | 54.0% |
| Treated Soya Oil         | 24.0% | 26.0% |
| Mineral Spirits & Driers | 21.0% | 23.0% |

#### QUALITATIVE REQUIREMENTS

|                                         |      |     |
|-----------------------------------------|------|-----|
| Weight of 1 gallon of paint             | 13.8 | --- |
| Consistency, Krebs Stormer, KU @ 80° F. | 87   | --- |
| Drying Time - Set-up - hours            | ---  | 12  |
| Recoat - hours                          | ---  | 48  |

#### CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

#### WORKING PROPERTIES

When applied by brushing on wood surfaces previously primed with a coat of Y-1851 House Paint Primer, the paint of this specification shall have good flowing and brushing properties, shall not pull under the brush, and shall dry to a uniform, smooth level appearance without streaking, running, or sagging. The dried paint shall show moderate but not excessive brush marks and shall have an oil-gloss appearance.

## SPECIFICATION NO. 1828

## EXTERIOR PAINT - DARK GREEN

This paint is intended for use where high quality, ready-mixed paint is specified for wood, masonry or metal surfaces.

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 18.0%   | 20.0%   |
| % Vehicle                 | 80.0%   | 82.0%   |
| Solids by Volume          | 59.3%   | ---     |

## PIGMENT

|                     |       |       |
|---------------------|-------|-------|
| C. P. Chrome Green  | ---   | ---   |
| Chromium Oxide      | 60.0% | 63.0% |
| Yellow Iron Oxide   | ---   | ---   |
| Monastral Blue      | 3.0%  | 4.0%  |
| Titanium Oxide      | ---   | ---   |
| Calcium Carbonate   | 24.0% | 26.0% |
| C. P. Chrome Yellow | 8.0%  | 9.0%  |

## VEHICLE

|                                 |       |       |
|---------------------------------|-------|-------|
| Non-Volatile (Soya Alkyd Resin) | 60.0% | 63.0% |
| Mineral Spirits & Drier         | 37.0% | 40.0% |

## QUALITATIVE REQUIREMENTS

|                                                             |          |           |
|-------------------------------------------------------------|----------|-----------|
| Weight of 1 gallon of paint                                 | 9.0 lbs. | 9.2 lbs.  |
| Water, percent by weight                                    | ---      | 1.0%      |
| Coarse particles (residue retained on a 325 standard sieve) | ---      | 1.5%      |
| Consistency No. 4 Ford Cup                                  | 95 secs. | 105 secs. |
| Drying Time - Set-up hours                                  | ---      | 12        |
| Recoat hours                                                | ---      | 48        |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

## COLOR

Standard color chips will be supplied upon request.

## SKINNING

The paint shall not skin within 24 hours in a three-quarter filled closed container.

## APPLICATION, LEVELING, AND NON-SAGGING PROPERTIES

When applied to a primed steel panel at a spreading rate of about 500 sq. ft. per gallon, the paint shall be capable of easy application with a 2-1/2 inch brush, shall flow out to a smooth film free from conspicuous brush marks and shall show no sagging when dried in a vertical position.

### C. ENDURANCE IMPERIAL HOUSE PAINT Y-1867

Endurance Imperial -- The Cadillac of Oil House Paints. This amazing one-coat paint is fortified with alkyds to give extra durability and lasting beauty.

Endurance Imperial is ideal for use over old painted surfaces in good repaintable condition which have been allowed to weather beyond the point where one coat of conventional house paint would be sufficient to give adequate protection. A "built-in" second coat offers home owners a two-coat job in one application.

On new construction, a prime coat and two finish coats are needed for best results. However, in order to cut cost the majority of jobs call for one prime coat and one finish coat. Here again, Imperial will

give that much needed added protection when used as a system with  
Endurance Exterior Basecoat.

Feature Points

1. High hiding -- two coats with one application
2. Super white with lasting gloss
3. Easy brushing
4. Good elasticity
5. Self cleaning -- controlled chalking
6. Long lasting -- alkyd fortified

APPLICATION -- Brush or Spray

DRYING TIME -- Set-to-touch 12 hours  
Recoat 48 hours

THINNER -- Mineral Spirits

COVERAGE -- Up to 550 square feet per gallon

SPECIFICATION NO. 1867

IMPERIAL HOUSE PAINT

This specification covers a super quality, alkyd-fortified White House Paint, so formulated as to make One Coat painting practical. It contains the most durable combination of white pigments, purified oil and alkyd resin to provide extra high hiding and long life. Through controlled chalking this paint maintains its whiteness and clean appearance for many years.

It shall be used only as a white and should not be tinted.

## REQUIREMENTS

**PIGMENT** - The pigment shall consist of a combination of titanium dioxides, leaded zinc oxide, and magnesium silicate to yield the required hiding and controlled chalking of this product.

**VEHICLE** - The vehicle shall consist of refined linseed oil, linseed alkyd resin, mineral spirits and driers to yield a product meeting the requirements of this specification.

### QUANTITATIVE REQUIREMENTS

MINIMUM                      MAXIMUM

|                     |       |       |
|---------------------|-------|-------|
| % Pigment by weight | 60.0% | 62.0% |
| % Vehicle by weight | 38.0% | 40.0% |
| Solids by Volume    | 82.1% | ---   |

### PIGMENT COMPOSITION

|                       |       |       |
|-----------------------|-------|-------|
| 18% Leaded Zinc Oxide | 35.0% | 36.0% |
| Titanium Dioxide      | 27.0% | 28.0% |
| Magnesium Silicate    | 35.0% | 36.0% |

### VEHICLE COMPOSITION

|                                   |       |       |
|-----------------------------------|-------|-------|
| Linseed Alkyd Resin & Linseed Oil | 77.0% | 79.0% |
| Mineral Spirits & Driers          | 21.0% | 23.0% |

### QUALITATIVE REQUIREMENTS

|                                                             |           |      |
|-------------------------------------------------------------|-----------|------|
| Weight per gallon                                           | 14.0 lbs. | ---  |
| Water, percent by weight                                    | ---       | 1.0% |
| Coarse particles (residue retained on a 325 standard sieve) | ---       | 2.0% |
| Consistency, KU @ 80° F. (Stormer)                          | 82        | 87   |
| Drying Time - Set-up hours                                  | ---       | 12   |
| Recoat hours                                                | ---       | 48   |

### CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked, or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

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#### WORKING PROPERTIES

When applied by brushing on wood surfaces previously primed with a coat of Exterior Base Coat, the paint of this specification shall have good flowing and brushing properties, shall not pull under the brush, and shall dry to a uniform, smooth, level appearance without streaking, running, or sagging. The dried paint shall show moderate but not excessive brush marks and shall have a good oil-gloss appearance.

#### D. ENDURANCE (Mildew and Fume Resistant) HOUSE PAINT, Y-1850

A super white, lead-free house paint formulated especially for use in industrial areas, where paints are subjected to discoloration from the reaction of chemical fumes, heavy smog and smoke with lead pigments (hydrogen-sulphide blackening). A non-staining house paint that stays white and bright for years. Combats mold, mildew and the roughest year-round weather.

The hiding and brushing qualities of Y-1850 are nearly equal to Imperial House Paint.

#### Feature Points

1. A super white that stays white
2. Mildew and fume resistant
3. Lead free
4. High hiding
5. Easy brushing
6. Non-staining

APPLICATION -- Brush or Spray  
 DRYING TIME -- 12 hours; 48 hours for recoating  
 THINNERS -- Mineral Spirits or Turpentine  
 COVERAGE -- Up to 550 square feet per gallon

## SPECIFICATION NO. 1850

## MILDEW &amp; FUME RESISTING OUTSIDE WHITE

This specification covers a ready-mixed, mildew and fume resisting paint for use on exterior wood, metal or masonry surfaces. It shall contain no lead compounds.

It shall meet the following composition requirements:

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 56.0%   | 58.0%   |
| % Vehicle                 | 42.0%   | 44.0%   |
| Solids by Volume          | 78.5%   | ---     |

## PIGMENT COMPOSITION

|                    |       |       |
|--------------------|-------|-------|
| Titanium Calcium   | 34.0% | 35.0% |
| Titanium Oxide     | 10.0% | 11.0% |
| Zinc Oxide         | 34.0% | 35.0% |
| Magnesium Silicate | 20.0% | 21.0% |

## VEHICLE COMPOSITION

|                         |       |       |
|-------------------------|-------|-------|
| Treated Linseed Oil     | 55.0% | 56.0% |
| Bodied Linseed Oil      | 18.0% | 19.0% |
| Mineral Spirits & Drier | 27.0% | 28.0% |

## QUALITATIVE REQUIREMENTS

|                                                         |           |      |
|---------------------------------------------------------|-----------|------|
| Weight of one gallon of paint                           | 13.2 lbs. | ---  |
| Water, percent by weight                                | ---       | 1.0% |
| Coarse particles (residue retained on a 325 mesh sieve) | ---       | 2.0% |
| Consistency, Krebs-Stormer, KU @ 80° F.                 | 85        | 95   |
| Drying Time - Set-up hours                              | ---       | 12   |
| Recoat hours                                            | ---       | 48   |

#### CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked or thickened to such a degree that it cannot be redispersed readily with a paddle to a smooth, uniform paint of good brushing consistency.

#### WORKING PROPERTIES

When applied by brushing on wood surfaces previously primed with a coat of 1851 House Paint Primer, the paint of this specification shall have good flowing and brushing properties, shall not pull under the brush, and shall dry to a uniform smooth level appearance without streaking, running or sagging. The dried paint shall show moderate but not excessive brush marks and shall have an oil-gloss appearance.

#### COLOR

White. This formula should not be used as a base for tinting.

#### E. ENDURANCE VELVET, Y-2750

An excellent flat sheen house paint for all exterior wood surfaces -- a ready-to-use product ideally suited for siding, shingles and shakes.

Endurance Velvet is not simply an alkyd flat wall paint with exterior pigments, as many "flat house paints" really are. It is especially formulated as a house paint, for maximum lasting of color and protective qualities. It dries dust free in less than one hour and provides a beautiful, velvet-flat appearance.

Endurance Velvet provides a breather film which permits the passage of moisture vapor from interior wall areas, thus resisting blistering and peeling. When used as a system with Endurance Exterior Basecoat as a primer over new or unpainted wood, it is not likely to blister. However, when used over old painted surfaces there is the possibility of the old paint blistering under the velvet top coat.

#### Feature Points

1. Ease of application
2. Possesses a beautiful velvet sheen
3. Has breathing qualities
4. Has maximum mildew resistance for flat house paint
5. Lasting color and protective qualities

APPLICATION -- Brush or Spray

DRYING TIME -- Dust free 2 hours  
48 hours for recoating

THINNER -- Mineral Spirits or Turpentine

COVERAGE -- Up to 550 square feet per gallon

SPECIFICATION NO. 2750

FLAT EXTERIOR FINISH

This specification covers a ready-mixed Flat Exterior Finish suitable for application on wood shingles, shakes, wood siding and trim; may also be used on masonry, asbestos shingles and metal surfaces.

## REQUIREMENTS

It shall consist of titanium dioxide, zinc oxide, silica and silicates ground in a suitable mixture of bodied linseed oil, alkyd, mineral spirits and drier to yield a product conforming to the requirements of this specification.

## QUANTITATIVE REQUIREMENTS

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 53.5%   | 55.5%   |
| % Vehicle                 | 44.5%   | 46.5%   |
| Solids by Volume          | 52.5%   | ---     |

## PIGMENT COMPOSITION

|                      |       |       |
|----------------------|-------|-------|
| Titanium Dioxide     | 23.5% | 24.5% |
| Zinc Oxide           | 29.5% | 30.5% |
| Silica and Silicates | 45.0% | 47.0% |

## VEHICLE COMPOSITION

|                           |       |       |
|---------------------------|-------|-------|
| Bodied linseed oil, alkyd | 43.0% | 44.0% |
| Mineral Spirits & Driers  | 56.0% | 57.0% |

## QUALITATIVE REQUIREMENTS

|                            |                |
|----------------------------|----------------|
| Color                      | White          |
| Viscosity                  | 83 - 90 K.U.   |
| Weight per gallon          | 12.0 lbs. min. |
| Drying Time - set-up hours | 2              |
| recoat hours               | 48             |
| Sheen                      | Flat           |
| Fineness                   | 3-4            |

CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be caked, settled or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth uniform paint for good brushing consistency.

### BRUSHING PROPERTIES

The paint shall brush easily at package consistency and show no running or streaking. If any thinning is required use mineral spirits or turpentine.

### APPLICATION

Follow directions on the package label.

#### F. ENDURANCE NON-CHALKING WHITE, Y-1892

Especially formulated for use wherever non-chalking characteristics are required. The unusual elasticity, whiteness and gloss retention of this house paint makes it ideal for all exterior painting on wood or metal.

It will eliminate chalk staining on masonry or dark painted areas when applied adjacent to them.

Also designed as a tinting white. May be tinted with Dramatone tinting colors or Colors in Oil with long lasting results since the color will not "chalk-out."

This is the same finish as the No. 22 Non-Chalking White in the Maintenance line.

#### Feature Points

1. Excellent gloss and whiteness retention
2. Ease of brushing
3. High hiding
4. Good elasticity
5. Non-Chalking

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APPLICATION -- Brush, Spray  
 DRYING TIME -- 12 hours, recoat in 48 hours  
 THINNER -- Mineral Spirits or Turpentine  
 COVERAGE -- Up to 600 square feet per gallon

# SPECIFICATION NO. 1892

## ENDURANCE NON-CHALKING WHITE HOUSE PAINT

This specification covers an All-Purpose House Paint to be used wherever non-chalking characteristics or tinting is desired. It is especially recommended for painting those areas adjacent to masonry or dark painted areas, as it eliminates unsightly streaks caused by the weathering away of conventional type paints.

### REQUIREMENTS

PIGMENT - The pigment shall consist of a combination of full non-chalking titanium dioxide, zinc oxide, and calcium carbonate.

VEHICLE - The vehicle shall consist of refined linseed oil, mineral spirits and driers to yield a product meeting the requirements of this specification.

### QUANTITATIVE REQUIREMENTS

|                     | MINIMUM | MAXIMUM |
|---------------------|---------|---------|
| % Pigment by weight | 64.0%   | 65.0%   |
| % Vehicle by weight | 35.0%   | 36.0%   |
| Solids by Volume    | 84.0%   | ---     |

### PIGMENT COMPOSITION

|                           |       |       |
|---------------------------|-------|-------|
| Titanium Dioxide (Rutile) | 21.5% | 22.0% |
| Zinc Oxide                | 16.0% | 17.0% |
| Calcium Carbonate         | 61.0% | 62.5% |

| VEHICLE COMPOSITION      | MINIMUM | MAXIMUM |
|--------------------------|---------|---------|
| Refined Linseed Oil      | 78.0%   | 80.0%   |
| Mineral Spirits & Driers | 20.0%   | 22.0%   |

#### QUALITATIVE REQUIREMENTS

|                                                                 |           |      |
|-----------------------------------------------------------------|-----------|------|
| Weight per gallon, pounds                                       | 14.0 lbs. | ---  |
| Water, percent by weight                                        | ---       | 1.0% |
| Coarse particles (residue retained<br>on a #325 standard sieve) | ---       | 2.0% |
| Consistency, K.U. @ 80° F. (Stormer)                            | 87        | 92   |
| Drying Time - Set-up hours                                      | ---       | 12   |
| Recoat hours                                                    | ---       | 48   |

#### CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked, or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

#### WORKING PROPERTIES

When applied by brushing on wood surfaces properly primed with a coat of Exterior Base Coat, the paint of this specification shall have good flowing and brushing properties, shall not pull under the brush, and shall dry to a uniform, smooth level appearance without streaking, running, or sagging. The dried paint shall show moderate but not excessive brush marks and shall have an oil-gloss appearance.

#### G. ENDURANCE BARN PAINT Y-620

This is not a mill end paint. It has been specially formulated with many desirable properties which makes it an exceptional product in this field. In many cases, surface conditions on farm buildings are very poor, due to deferred painting beyond a reasonable period. Bare wood or old, checked and disintegrated paint are often in evidence, and add

to the difficulty of securing a creditable paint job. All these conditions were taken into consideration in the development of Endurance Barn Paint. It has excellent hiding power. It dries to a tough gloss film. Provides long-lasting protection.

APPLICATION -- Brush, Spray, Roller  
 DRYING TIME -- Overnight, 36 hours for recoating  
 THINNER -- Mineral Spirits or Turpentine  
 COVERAGE -- Up to 500 sq. ft. per gallon

#### SPECIFICATION Y-500

#### ENDURANCE RED BARN PAINT - READY-MIXED

This paint is specified for use on wood and metal surface for general maintenance purposes. The paint shall be of the ready-mixed type.

The paint shall meet the following requirements:

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 50.0%   | 52.0%   |
| % Vehicle                 | 48.0%   | 50.0%   |
| Solids by Volume          | 54.3%   | ---     |
| PIGMENT COMPOSITION       |         |         |
| Iron Oxide                | 24.0%   | 26.0%   |
| Zinc Oxide                | 4.0%    | 5.5%    |
| Calcium Carbonate         | 68.0%   | 70.0%   |
| Lead Oxide                | 1.0%    | 2.0%    |
| VEHICLE COMPOSITION       |         |         |
| Treated Vegetable Oil     | 42.0%   | 43.0%   |
| Prepared Rosin            | 5.0%    | 6.0%    |
| Mineral Spirits & Drier   | 51.0%   | 52.0%   |

## QUALITATIVE REQUIREMENTS

|                                                                 | MINIMUM   | MAXIMUM   |
|-----------------------------------------------------------------|-----------|-----------|
| Weight of one gallon of paint                                   | 11.5 lbs. | 12.0 lbs. |
| Water, percent by weight                                        | ---       | 1.0%      |
| Coarse particles (residue retained<br>on a #325 standard sieve) | ---       | 2.0%      |
| Consistency, #4 Ford Cup                                        | 80 sec.   | 90 sec.   |
| Drying Time - Set-up hours                                      | ---       | 18        |
| Recoat hours                                                    | ---       | 72        |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

## COLOR

The color shall match the standard chip.

## BRUSHING PROPERTIES

The paint as received shall brush easily and show no running, streaking or sagging.

H. STOCK FARM WHITE Y-596

For use around such places as stock farms, chicken farms, race tracks, stables or any place where it is necessary to present a clean white sanitary appearance. Suitable for exterior use on buildings, fences, sheds, etc. It is formulated without lead pigments, and contains wood preservative. The creosote-like odor tends to repulse livestock. Made of high hiding pigments. A white that will stay white and give long lasting service.

GLD32863

APPLICATION -- Brush, Spray  
 DRYING TIME -- Overnight - 72 hours for recoating  
 THINNER -- Mineral Spirits or Turpentine  
 COVERAGE -- Up to 450 sq. ft. per gallon

# I. TINNERS RED Y-620

Tinners Red sometime referred to as Oxide Red. This is not a cheap mill end paint but formulated to do a specific job.

Tinners Red is recommended for metal roofs, flashings, gutters, down spouts, and work inside tin shops.

Tinners is also satisfactory on wood and brick.

APPLICATION -- Brush, Spray, Roller  
 DRYING TIME -- Overnight - 36 hours for recoating  
 THINNER -- Mineral Spirits or Turpentine  
 COVERAGE -- Up to 500 sq. ft. per gallon

## SPECIFICATION Y-620

### TINNERS RED

This specification covers red oxide paint suitable for painting gutters, flashing, down spouts, metal roofs and for work inside tin shops.

The paint shall meet the following requirements:

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 50.0%   | 51.0%   |
| % Vehicle                 | 48.0%   | 49.0%   |
| Solids by Volume          | 54.3%   | ---     |

## PIGMENT COMPOSITION

|                   | MINIMUM | MAXIMUM |
|-------------------|---------|---------|
| Iron Oxide        | 24.0%   | 25.5%   |
| Zinc Oxide        | 4.5%    | ---     |
| Calcium Carbonate | 68.0%   | 70.0%   |
| Lead Oxide        | 1.0%    | 2.0%    |

## VEHICLE COMPOSITION

|                         |       |       |
|-------------------------|-------|-------|
| Treated Vegetable Oil   | 42.0% | 43.0% |
| Prepared Rosin          | 5.0%  | 6.0%  |
| Mineral Spirits & Drier | 51.0% | 52.0% |

## QUALITATIVE REQUIREMENTS

|                                                                 |           |           |
|-----------------------------------------------------------------|-----------|-----------|
| Weight of one gallon of paint                                   | 11.5 lbs. | 12.0 lbs. |
| Water percent by weight                                         | ---       | 1.0%      |
| Coarse particles (residue retained<br>on a #325 standard sieve) | ---       | 2.0%      |
| Consistency #4 Ford Cup                                         | 80 sec.   | 90 sec.   |
| Drying Time - Set-up hours                                      | ---       | 12        |
| Recoat hours                                                    | ---       | 72        |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

## COLOR

The color shall match the standard chip.

## BRUSHING PROPERTIES

The paint as received shall brush easily and show no running, streaking or sagging.

J. PROFESSIONAL HOUSE PAINT PRIMER, NO. 51 (Y-5051)

Our sales of this fine primer have increased rapidly since it was introduced just a few years ago.

GLD32865

This is an outstanding painter type piece of goods having excellent ease of brushing, good sealing properties, good hide, good color and good price. This is used in a system with No. 18 or No. 22 Professional House Paints. Should be used as a first coat on new exterior wood or previously painted wood that is badly weathered or chalking. Also to spot prime bare spots resulting from peeling, flaking or scraping previously applied coating.

No. 51 Primer will seal and form a uniform and non-absorbent film over surfaces generally encountered in painting houses.

#### Feature Points

1. Excellent adhesion to surface and top coat
2. Good hiding
3. Good elasticity
4. Easy brushing
5. Resist checking, cracking and flaking when exposed as a single film
6. Seals uniformly

APPLICATION -- Brush or Spray

DRYING TIME -- 18 to 24 hours for recoating

THINNER -- Mineral Spirits or Turpentine

COVERAGE -- Up to 600 sq. ft. per gallon

## SPECIFICATION NO. 5051

## EXTERIOR PRIMER, WHITE

This specification covers a ready-mixed exterior primer for exterior wood surfaces and previously painted house paint. It shall meet the following composition requirements.

| QUANTITATIVE REQUIREMENTS | MINIMUM | MAXIMUM |
|---------------------------|---------|---------|
| % Pigment                 | 60.0%   | 62.0%   |
| % Vehicle                 | 38.0%   | 40.0%   |
| Solids by Volume          | 70.9%   | 71.9%   |

## PIGMENT

|                                          |       |       |
|------------------------------------------|-------|-------|
| Basic Silicate White Lead (48% PbO Type) | 16.0% | 17.0% |
| Titanium Dioxide                         | 16.0% | 17.0% |
| Titanium Calcium                         | 7.5%  | 8.5%  |
| Mica                                     | 5.5%  | 6.5%  |
| Magnesium Silicate                       | 27.0% | 28.0% |
| Calcium Carbonate                        | 24.0% | 25.0% |

## VEHICLE

|                            |       |       |
|----------------------------|-------|-------|
| Linseed Oil                | 38.0% | 39.0% |
| Soya Alkyd                 | 23.0% | 24.0% |
| Mineral Spirits and Driers | 37.0% | 38.0% |

## QUALITATIVE REQUIREMENTS

|                                                         |       |         |
|---------------------------------------------------------|-------|---------|
| Weight per gallon                                       | 13.3% | ---     |
| Water, % by weight                                      | ---   | 1.0%    |
| Coarse particles (residue retained on a 325 mesh sieve) | ---   | 2.0%    |
| Consistency, Krebs Stormer                              | 80 KU | 85 KU   |
| Drying Time - Set-to-touch                              | ---   | 10 hrs. |
| Recoating                                               | ---   | 48 hrs. |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be caked, settled or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

GLD32867

#### WORKING PROPERTIES

The paint shall brush easily at package consistency, and shall permit lapping without difficulty for a minimum of seven minutes.

#### SEALING PROPERTIES

Brush a film of the paint at a spreading rate of 450 sq. ft. per gallon uniformly over most of the surface of a western red cedar panel cut from lumber of the quality known as Grade A Select. The panel shall be not less than 5 x 18 inches in size. Brush the paint with a 1-1/2 inch brush over an area of 5" x 16", leaving an area 5" x 2" at one end of the panel uncoated. Allow to dry for 48 hours; then cover the entire area with one uniform coat of tinted semi-gloss paint, applied at the rate of 600 sq. ft. per gallon. Allow to dry for 72 hours and then examine to determine whether the dried film applied over the primer presents a substantially uniform, semi-gloss appearance in contrast to that portion applied over the bare wood at one end of the panel.

#### K. PROFESSIONAL HOUSE PAINT Y-5018 WHITE

Designed for professional, top quality workmanship. A well balanced formula with outstanding characteristics -- excellent durability, freedom from dirt collection, mildew and fume resisting, self cleaning, excellent hiding, good color retention and easy application properties.

#### SPECIFICATION NO. 5018

#### EXTERIOR HOUSE PAINT

This specification covers a painter quality exterior oil paint to be used over properly primed wood, masonry and metal surfaces.

## QUANTITATIVE REQUIREMENTS

|                     | MINIMUM | MAXIMUM |
|---------------------|---------|---------|
| % Pigment by weight | 62.0%   | 64.0%   |
| % Vehicle by weight | 56.0%   | 58.0%   |
| Solids by Volume    | 82.1%   | 83.1%   |

## PIGMENT COMPOSITION

|                                       |       |       |
|---------------------------------------|-------|-------|
| *Titanium Dioxide                     | 18.0% | 19.0% |
| Zinc Oxide                            | 16.0% | 17.0% |
| Calcium Carbonate                     | 64.0% | 66.0% |
| *40% shall be rutile Titanium Dioxide |       |       |

## VEHICLE COMPOSITION

|                          |       |       |
|--------------------------|-------|-------|
| Refined Linseed Oil      | 75.0% | ---   |
| Mineral Spirits & Driers | ---   | 25.0% |

## QUALITATIVE REQUIREMENTS

|                                                          |      |      |
|----------------------------------------------------------|------|------|
| Weight per gallon, pounds                                | 13.7 | ---  |
| Viscosity, Krebs Units                                   | 85   | 92   |
| Drying Time - Set-up hours                               | ---  | 12   |
| Recoat hours                                             | ---  | 48   |
| Water                                                    | ---  | 1%   |
| Coarse particles (residue retained on a #325 mesh sieve) | ---  | 2.0% |

## CONDITION IN CONTAINER

The paint shall be thoroughly mixed and ground. It shall not be settled, caked, or thickened to such a degree that it cannot be redispersed easily with a paddle to a smooth, uniform paint of good brushing consistency.

## WORKING PROPERTIES

When applied by brushing on wood surfaces properly primed with a coat of No. 5051 Exterior Primer, the paint of this specification shall have good flowing and brushing properties, shall not pull under the brush, and shall dry to a uniform, smooth level appearance without streaking, running or sagging. The dried paint shall show moderate but not excessive brush marks and shall have an oil-gloss appearance.

GLD32869