Material Safety Data Sheet

Revision Date: 20-Dec-2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 2.4 Lb/GL PRE-STAINER ALKYD EXTERIOR PRIMER WHITE
Product Code R0006485
Product Class SOLVENT THINNED PAINT
Color White

Manufacturer Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 201-573-9600
www.benjaminmoore.com

Emergency Telephone Number(s)
CHEMTREC: 800-424-9300

2. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight % (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>35</td>
</tr>
<tr>
<td>Nepheline syenite</td>
<td>37244-96-5</td>
<td>20</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>10</td>
</tr>
<tr>
<td>VM&amp;P naphtha</td>
<td>64742-89-8</td>
<td>10</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>8052-41-3</td>
<td>10</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light</td>
<td>64742-47-8</td>
<td>5</td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td>61790-53-2</td>
<td>5</td>
</tr>
<tr>
<td>Silica, crystalline</td>
<td>14808-60-7</td>
<td>0.5</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

**Emergency Overview**

**WARNING**

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis. Combustible material.

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded.

**Appearance** liquid

**Odor** solvent
OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects

Principal Routes of Exposure

Eye contact, skin contact and inhalation.

Acute Effects

Eyes

Contact with eyes may cause irritation.

Skin

May cause skin irritation and/or dermatitis.

Inhalation

High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.

Ingestion

Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

Chronic Effects

Avoid repeated exposure

Contains: Crystalline Silica which has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions

None known

HMIS

Health: 1*

Flammability: 2

Reactivity: 0

PPE: -

4. FIRST AID MEASURES

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation
Move to fresh air. If symptoms persist, call a physician.
If not breathing, give artificial respiration. Call a physician immediately

Ingestion
Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.

Notes To Physician
Treat symptomatically

Protection Of First-Aiders
Use personal protective equipment

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Foam, dry powder or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective Equipment And Precautions For Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

 Specific Hazards Arising From The Chemical
Combustible material. Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

Sensitivity To Mechanical Impact
No

Sensitivity To Static Discharge
Yes

Flash Point Data

<table>
<thead>
<tr>
<th>Flash Point (°F)</th>
<th>104</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (°C)</td>
<td>40</td>
</tr>
</tbody>
</table>

Flash Point Method
PMCC

Flammability Limits In Air

<table>
<thead>
<tr>
<th>Lower Explosion Limit</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Explosion Limit</td>
<td>Not available</td>
</tr>
</tbody>
</table>

NFPA
Health: 1 Flammability: 2 Instability: 0 Special: Not Applicable

NFPA Legend
0 - Not Hazardous
1 - Slightly
2 - Moderate
3 - High
4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods For Clean-Up
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Other Information
None known

7. HANDLING AND STORAGE

Handling
Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear personal protective equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep in properly labeled containers.

DANGER - Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>N/E</td>
<td>15 mg/m³ - TWA total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³ - TWA</td>
</tr>
<tr>
<td>Nepheline syenite</td>
<td>N/E</td>
<td>5 mg/m³ - TWA (nuisance dust)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ - TWA</td>
<td>15 mg/m³ - TWA total</td>
</tr>
<tr>
<td>VM&amp;P naphtha</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>100 ppm - TWA</td>
<td>2900 mg/m³ - TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm - TWA</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td>N/E</td>
<td>(80)/(% SiO2) mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mppcf - TWA</td>
</tr>
<tr>
<td>Silica, crystalline</td>
<td>0.025 mg/m³ - TWA</td>
<td>(250)/(%SiO2 + 5) mppcf</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10)/(%SiO₂ + 2) mg/m³ TWA</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100 ppm - TWA</td>
<td>100 ppm - TWA</td>
</tr>
<tr>
<td></td>
<td>125 ppm - STEL</td>
<td>435 mg/m³ - TWA</td>
</tr>
</tbody>
</table>

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Legend
ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits
OSHA - Occupational Safety & Health Administration Exposure Limits
N/E - Not Established

Engineering Measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment
- **Eye/Face Protection**: Safety glasses with side-shields.
- **Skin Protection**: Long sleeved clothing. Protective gloves.
- **Respiratory Protection**: In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.

Hygiene Measures
Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. When using do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>solvent</td>
</tr>
<tr>
<td><strong>Density (lbs/gal)</strong></td>
<td>12.8 - 12.9</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>1.53 - 1.55</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity (centistokes)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Wt. % Solids</strong></td>
<td>75 - 85</td>
</tr>
<tr>
<td><strong>Vol. % Solids</strong></td>
<td>60 - 70</td>
</tr>
<tr>
<td><strong>Wt. % Volatiles</strong></td>
<td>15 - 25</td>
</tr>
<tr>
<td><strong>Vol. % Volatiles</strong></td>
<td>30 - 40</td>
</tr>
<tr>
<td><strong>VOC Regulatory Limit (g/L)</strong></td>
<td>&lt; 350</td>
</tr>
<tr>
<td><strong>Boiling Point (°F)</strong></td>
<td>185</td>
</tr>
<tr>
<td><strong>Boiling Point (°C)</strong></td>
<td>85</td>
</tr>
<tr>
<td><strong>Freezing Point (°F)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing Point (°C)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash Point (°F)</strong></td>
<td>104</td>
</tr>
<tr>
<td><strong>Flash Point (°C)</strong></td>
<td>40</td>
</tr>
<tr>
<td><strong>Flash Point Method</strong></td>
<td>PMCC</td>
</tr>
<tr>
<td><strong>Upper Explosion Limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Lower Explosion Limit</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Chemical Stability**
Stable under normal conditions. Hazardous polymerisation does not occur.
<table>
<thead>
<tr>
<th>Conditions To Avoid</th>
<th>Keep away from open flames, hot surfaces, static electricity and sources of ignition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatible Materials</td>
<td>Incompatible with strong acids and bases and strong oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Thermal decomposition can lead to release of irritating gases and vapors.</td>
</tr>
<tr>
<td>Possibility Of Hazardous Reactions</td>
<td>None under normal conditions of use.</td>
</tr>
</tbody>
</table>

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product**
Repealed or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

### Component

- **Limestone**
  - LD50 Oral: 6,450 mg/kg (Rat) vendor data
  - Sensitization: No sensitizing effects known.

- **Nepheline syenite**
  - Sensitization: No sensitizing effects known.

- **Titanium dioxide**
  - LD50 Oral: > 10000 mg/kg (Rat)
  - LD50 Dermal: > 10000 mg/m³ (Rabbit)
  - LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

- **Stoddard solvent**
  - LD50 Oral: > 5,000 mg/kg (Rat)
  - LD50 Dermal: > 3160 mg/kg (Rabbit)
  - LC50 Inhalation (Vapor): > 6.1 mg/L (Rat)

- **Distillates, petroleum, hydrotreated light**
  - LD50 Oral: > 5,000 mg/kg (Rat)
  - LD50 Dermal: > 3,000 mg/kg (Rabbit)

- **Silica, crystalline**
  - LD50 Oral: 500 mg/kg (Rat) vendor data

- **Ethyl benzene**
  - LD50 Oral: 3500 mg/kg (Rat)
  - LD50 Dermal: > 5000 mg/kg (Rabbit)
  - LC50 Inhalation (Vapor): 55000 mg/m³ (Rat, 2 hr.)
  - Sensitization: No sensitizing effects known.
**Chronic Toxicity**

**Carcinogenicity**
The information below indicates whether each agency has listed any ingredient as a carcinogen:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>2B - Possible Human Carcinogen</td>
<td></td>
<td>Listed</td>
</tr>
<tr>
<td>Silica, crystalline</td>
<td>A2 - Suspected Human Carcinogen</td>
<td>1 - Human Carcinogen</td>
<td>Known Human Carcinogen</td>
<td>Listed</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans</td>
<td>2B - Possible Human Carcinogen</td>
<td></td>
<td>Listed</td>
</tr>
</tbody>
</table>

- Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint. 
- Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

**Legend**
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
NTP - National Toxicity Program
OSHA - Occupational Safety & Health Administration

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### 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects**

**Product**

**Acute Toxicity to Fish**
No information available

**Acute Toxicity to Aquatic Invertebrates**
No information available

**Acute Toxicity to Aquatic Plants**
No information available

**Component**

**Acute Toxicity to Fish**
12. ECOLOGICAL INFORMATION

Titanium dioxide
LC50: >1000 mg/L (Fathead Minnow - 96 hr.)

Ethyl benzene
LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene
EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

Acute Toxicity to Aquatic Plants

Ethyl benzene
EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name: Paint
Hazard Class: 3
UN-No: UN1263
Packing Group: III

In the US this material may be reclassified as a Combustible Liquid and is not regulated in containers of less than 119 gallons (450 liters) via surface transportation (refer to 49CFR173.120(b)(2) for further information).

ICAO / IATA
Contact the preparer for further information.

IMDG / IMO
Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

United States TSCA
Yes - All components are listed or exempt.

Canada DSL
Yes - All components are listed or exempt.
15. REGULATORY INFORMATION

Federal Regulations

SARA 311/312 hazardous categorization

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA 313

Section 3T3 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight % (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

This product may contain trace amounts of (other) SARA reportable chemicals. Contact the preparer for further information.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight % (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

This product may contain trace amounts of (other) HAPs chemicals. Contact the preparer for further information.

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Louisiana</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Silica, crystalline</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Legend

X - Listed
16. OTHER INFORMATION

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By
Product Stewardship Department
Benjamin Moore & Co.
360 Route 206 - P.O. Box 4000
Flanders, NJ 07836
866-690-1961

Revision Date: 20-Dec-2011
Revision Summary: Not available

Disclaimer
The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

End of MSDS