Material Safety Data Sheet

Revision Date: 17-Sep-2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
BENJAMIN MOORE UNIVERSAL ZERO VOC COLORANT

Product Code
332

Product Class
WATER THINNED PAINT

Color
All

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 855-724-6802
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>Titanium dioxide</td>
<td>13463-67-7</td>
<td>60</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>25</td>
</tr>
<tr>
<td>Magnesium carbonate</td>
<td>546-93-0</td>
<td>20</td>
</tr>
<tr>
<td>C.I. Pigment Blue 15</td>
<td>147-14-8</td>
<td>10</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>10</td>
</tr>
<tr>
<td>C.I. Pigment Green 7</td>
<td>1328-53-6</td>
<td>10</td>
</tr>
<tr>
<td>Alcohols, C11-14-iso-, C-13-rich, ethoxylated</td>
<td>78330-21-9</td>
<td>10</td>
</tr>
<tr>
<td>C.I. Pigment Green 36</td>
<td>14302-13-7</td>
<td>5</td>
</tr>
<tr>
<td>Proprietary nonionic surfactant blend</td>
<td>U97726-00-1</td>
<td>5</td>
</tr>
<tr>
<td>Iron oxide black</td>
<td>1317-61-9</td>
<td>5</td>
</tr>
<tr>
<td>Aluminum hydroxide</td>
<td>21645-51-2</td>
<td>5</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>5</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

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

Appearance liquid

Odor little or no odor

Potential Health Effects
Principal Routes of Exposure
Eye contact, skin contact and inhalation.

Acute Effects
- **Eyes**: May cause slight irritation.
- **Skin**: Substance may cause slight skin irritation.
- **Inhalation**: May cause irritation of respiratory tract.
- **Ingestion**: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects
Repeated contact may cause allergic reactions in very susceptible persons.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions
None known

Potential Environmental Effects
See Section 12 for additional Ecological information.

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td></td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

**HMIS Legend**
- 0 - Minimal Hazard
- 1 - Slight Hazard
- 2 - Moderate Hazard
- 3 - Serious Hazard
- 4 - Severe Hazard
- * - Chronic Hazard
- X - Consult your supervisor or S.O.P. for "Special" handling instructions.

**Note**: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

**Caution**: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

### 4. FIRST AID MEASURES

**General Advice**
No hazards which require special first aid measures.

**Eye Contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact**
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation**
Move to fresh air. If symptoms persist, call a physician.

**Ingestion**
Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.

**Notes To Physician**
Treat symptomatically

### 5. FIRE-FIGHTING MEASURES
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
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
Closed containers may rupture if exposed to fire or extreme heat.

Sensitivity To Mechanical Impact
No

Sensitivity To Static Discharge
No

Flash Point Data
- Flash Point (°F) Not applicable
- Flash Point (°C) Not applicable
- Flash Point Method Not applicable

Flammability Limits In Air
- Lower Explosion Limit Not applicable
- Upper Explosion Limit Not applicable

NFPA
- Health: 1
- Flammability: 0
- 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
Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Environmental Precautions
See Section 12 for additional Ecological Information.

Methods For Clean-Up
Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Other Information
None known

7. HANDLING AND STORAGE

Handling
Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage
Keep container tightly closed. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ - TWA</td>
<td>15 mg/m³ - TWA</td>
</tr>
<tr>
<td>Talc</td>
<td>2 mg/m³ - TWA</td>
<td>20 mppcf - TWA</td>
</tr>
<tr>
<td>Magnesium carbonate</td>
<td>N/E</td>
<td>15 mg/m³ - TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³ - TWA</td>
</tr>
<tr>
<td>C.I. Pigment Blue 15</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Carbon black</td>
<td>3.5 mg/m³ - TWA</td>
<td>3.5 mg/m³ - TWA</td>
</tr>
<tr>
<td>C.I. Pigment Green 7</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Alcohols, C11-14-iso-, C-13-rich, ethoxylated</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>C.I. Pigment Green 36</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Proprietary nonionic surfactant blend</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Iron oxide black</td>
<td>1 mg/m³ - TWA</td>
<td>N/E</td>
</tr>
<tr>
<td>Aluminum hydroxide</td>
<td>1 mg/m³ - TWA</td>
<td>N/E</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>N/E</td>
<td>- (80)/(% SiO2) mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mppcf - TWA</td>
</tr>
</tbody>
</table>

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
Protective gloves and impervious clothing

Respiratory Protection
In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures
Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor little or no odor
Density (lbs/gal) 9.2 - 16.5
Specific Gravity 1.10 - 1.97
pH Not available
Evaporation Rate Not available
Vapor Pressure Not available
Vapor Density Not available
Wt. % Solids 45 - 85
Vol. % Solids 35 - 65
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wt. % Volatiles</td>
<td>15 - 55</td>
</tr>
<tr>
<td>Vol. % Volatiles</td>
<td>35 - 65</td>
</tr>
<tr>
<td>VOC Regulatory Limit (g/L)</td>
<td>0</td>
</tr>
<tr>
<td>Boiling Point (°F)</td>
<td>212</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>100</td>
</tr>
<tr>
<td>Freezing Point (°F)</td>
<td>32</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>0</td>
</tr>
<tr>
<td>Flash Point (°F)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability  Stable under normal conditions.
Conditions To Avoid  Prevent from freezing
Incompatible Materials  No materials to be especially mentioned.
Hazardous Decomposition Products  None under normal use.
Possibility Of Hazardous Reactions  None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product  No information available

Component

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

C.I. Pigment Blue 15
LD50 Oral: > 15,000 mg/kg (Rat)

Carbon black
LD50 Oral: > 15400 mg/kg (Rat)
LD50 Dermal: > 3000 mg/kg (Rabbit)

Silica, amorphous
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>Listed</td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td></td>
<td>2B - Possible Human Carcinogen</td>
<td>Listed</td>
<td></td>
</tr>
</tbody>
</table>

- 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

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

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of in accordance with federal, state, and local regulations. Dry, empty containers may be recycled in a can recycling program. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT
Not regulated

ICAO / IATA
Not regulated

IMDG / IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

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

Canada DSL
No - Not all of the components are listed.
One or more component is listed on NDSL.

Federal Regulations

SARA 311/312 hazardous categorization

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</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 313 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:
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>C.I. Pigment Blue 15</td>
<td>147-14-8</td>
<td>10</td>
</tr>
<tr>
<td>C.I. Pigment Green 7</td>
<td>1328-53-6</td>
<td>10</td>
</tr>
<tr>
<td>C.I. Pigment Green 36</td>
<td>14302-13-7</td>
<td>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>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Louisiana</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Talc</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Magnesium carbonate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>C.I. Pigment Blue 15</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.I. Pigment Green 7</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>C.I. Pigment Green 36</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron oxide black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></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.
101 Paragon Drive
Montvale, NJ 07645
855-724-6802
Disclaimer

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End of MSDS