1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ORIGINS BY BENJAMIN MOORE ULTIMATE, EXTERIOR LO-LUSTRE, HOUSE & TRIM DEEP BASE
Product Code: K1193C (CT # 048-8584-0 & 048-8585-8)
Alternate Product Code: K1193C
Manufacturer Code: K1193C
Product Class: WATER THINNED PAINT
Color: All

Manufacturer: Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 855-724-6802
www.benjaminmoore.com

2. COMPOSITION INFORMATION ON 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>1 - 5%</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>1 - 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.

**HMIS - Health:** 1  **Flammability:** 0  **Reactivity:** 0  **PPE:** -

**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

**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
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ - TWA</td>
<td>10 mg/m³ - TWA</td>
<td>10 mg/m³ - TWA</td>
<td>10 mg/m³ - TWA</td>
<td>10 mg/m³ - TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 mg/m³ - TWA</td>
<td></td>
<td>TWAEV</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>2 mg/m³ - TWA</td>
<td>2 mg/m³ - TWA</td>
<td>2 mg/m³ - TWA</td>
<td>2 mg/m³ - TWA</td>
<td>10 mg/m³ - TWA</td>
</tr>
<tr>
<td></td>
<td>10 mg/m³ - STEL</td>
<td>10 mg/m³ - STEL</td>
<td>10 mg/m³ - STEL</td>
<td>10 mg/m³ - STEL</td>
<td>5 mg/m³ - TWA</td>
</tr>
</tbody>
</table>

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.
K1193C (CT # 048-8584-0 & 048-8585-8) - ORIGINS BY
BENJAMIN MOORE ULTIMATE, EXTERIOR
LO-LUSTRE, HOUSE & TRIM DEEP BASE

Revision Date: 30-Jun-2016

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
Alberta - Alberta Occupational Exposure Limits
British Columbia - British Columbia Occupational Exposure Limits
Ontario - Ontario Occupational Exposure Limits
Quebec - Quebec Occupational 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
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
liquid

Odor
little or no odor

Density (lbs/gal)
9.6 - 10.0

Specific Gravity
1.15 - 1.19

pH
Not available

Viscosity (centistokes)
Not available

Evaporation Rate
Not available

Vapor Pressure
Not available

Vapor Density
Not available

Wt. % Solids
40 - 50

Vol. % Solids
30 - 40

Wt. % Volatiles
50 - 60

Vol. % Volatiles
60 - 70

VOC Regulatory Limit (g/L)< 50

Boiling Point (°F)
212

Boiling Point (°C)
100

Freezing Point (°F)
32

Freezing Point (°C)
0

Flash Point (°F)
Not applicable

Flash Point (°C)
Not applicable

Flash Point Method
Not applicable

Upper Explosion Limit
Not available

Lower Explosion Limit
Not available

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
Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information
No information available

Component

Titanium dioxide
LD50 Oral: > 10000 mg/kg (Rat)

Zinc oxide
LD50 Oral: 5000 mg/kg (Rat)
LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

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>
</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 Information

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.)

**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, provincial, 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

**TDG**  
Not regulated

**ICAO / IATA**  
Not regulated

**IMDG / IMO**  
Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

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

**DSL: Canada**  
Yes - All components are listed or exempt.

**National Pollutant Release Inventory (NPRI)**

**NPRI Parts 1-4**  
This product contains the following Parts 1-4 NPRI chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Weight % (max)</th>
<th>NPRI Parts 1-4</th>
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<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>1 - 5%</td>
<td>Listed</td>
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**NPRI Part 5**  
This product contains the following NPRI Part 5 Chemicals:
WHMIS Regulatory Status

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
D2A Very toxic materials

### 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 logging onto Health Canada @ http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php.

**Prepared By**
Product Stewardship Department
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
855-724-6802

**Revision Date:**
30-Jun-2016

**Revision Summary**
No information 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