



# Material Safety Data Sheet

Revision Date: 30-Jun-2016

Revision Number: 2

## 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

**Emergency Telephone Number(s)**  
CANUTEC: 613-996-6666

## 2. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Titanium dioxide	13463-67-7	1 - 5%
Zinc oxide	1314-13-2	1 - 5%

## 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

<b>General Advice</b>	No hazards which require special first aid measures.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
<b>Notes To Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective Equipment And Precautions For Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific Hazards Arising From The Chemical</b>	Closed containers may rupture if exposed to fire or extreme heat.
<b>Sensitivity To Mechanical Impact</b>	No
<b>Sensitivity To Static Discharge</b>	No

**Flash Point Data**

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

**Flammability Limits In Air**

Upper Explosion Limit Not applicable  
 Lower 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](http://www.nfpa.org).*

**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**

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Titanium dioxide	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA 3 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA/EV
Zinc oxide	2 mg/m <sup>3</sup> - TWA 10 mg/m <sup>3</sup> - STEL	2 mg/m <sup>3</sup> - TWA 10 mg/m <sup>3</sup> - STEL	2 mg/m <sup>3</sup> - TWA 10 mg/m <sup>3</sup> - STEL	2 mg/m <sup>3</sup> - TWA 10 mg/m <sup>3</sup> - STEL	10 mg/m <sup>3</sup> - TWA/EV 5 mg/m <sup>3</sup> - TWA/EV

					10 mg/m <sup>3</sup> - STEV
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### 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

<b>Appearance</b>	liquid
<b>Odor</b>	little or no odor
<b>Density (lbs/gal)</b>	9.6 - 10.0
<b>Specific Gravity</b>	1.15 - 1.19
<b>pH</b>	Not available
<b>Viscosity (centistokes)</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Vapor Pressure</b>	Not available
<b>Vapor Density</b>	Not available
<b>Wt. % Solids</b>	40 - 50
<b>Vol. % Solids</b>	30 - 40
<b>Wt. % Volatiles</b>	50 - 60
<b>Vol. % Volatiles</b>	60 - 70
<b>VOC Regulatory Limit (g/L)</b>	< 50
<b>Boiling Point (°F)</b>	212
<b>Boiling Point (°C)</b>	100
<b>Freezing Point (°F)</b>	32
<b>Freezing Point (°C)</b>	0
<b>Flash Point (°F)</b>	Not applicable
<b>Flash Point (°C)</b>	Not applicable
<b>Flash Point Method</b>	Not applicable
<b>Upper Explosion Limit</b>	Not available
<b>Lower Explosion Limit</b>	Not available

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions.

**Conditions To Avoid** Prevent from freezing.

<b>Incompatible Materials</b>	No materials to be especially mentioned.
<b>Hazardous Decomposition Products</b>	None under normal use.
<b>Possibility Of Hazardous Reactions</b>	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/m<sup>3</sup> (Rat, 4 hr.)

### Chronic Toxicity

#### **Carcinogenicity**

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

<b>Chemical Name</b>	<b>ACGIH</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA Carcinogen</b>
Titanium dioxide		2B - Possible Human Carcinogen		Listed

• 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**

<b>TDG</b>	Not regulated
<b>ICAO / IATA</b>	Not regulated
<b>IMDG / IMO</b>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA: United States</b>	Yes - All components are listed or exempt.
<b>DSL: Canada</b>	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:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>NPRI Parts 1- 4</u>
Zinc oxide	1314-13-2	1 - 5%	Listed

**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](http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php).

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**Revision Summary** No information available

Disclaimer

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K1193C  
**End of MSDS**