



## Material Safety Data Sheet

Revision Date: 05-Feb-2013

Revision Number: 4

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** BENJAMIN MOORE COLLECTION EXTERIOR 100% ACRYLIC  
LOW LUSTRE HOUSE PAINT PASTEL BASE  
**Product Code** K1031B  
**Product Class** WATER THINNED PAINT  
**Color** All

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

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

### 2. COMPOSITION INFORMATION ON COMPONENTS

#### Hazardous Components

| Chemical Name      | CAS-No     | Weight % (max) |
|--------------------|------------|----------------|
| Titanium dioxide   | 13463-67-7 | 15 - 40%       |
| Kaolin             | 1332-58-7  | 1 - 5%         |
| Diatomaceous earth | 61790-53-2 | 1 - 5%         |
| Zinc oxide         | 1314-13-2  | 1 - 5%         |
| Silica, mica       | 12001-26-2 | 1 - 5%         |
| Silica, amorphous  | 7631-86-9  | 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

---

|                                     |                                                                                 |
|-------------------------------------|---------------------------------------------------------------------------------|
| <b>Principal Routes of Exposure</b> | Eye contact, skin contact and inhalation.                                       |
| <b>Acute Effects</b>                |                                                                                 |
| <b>Eyes</b>                         | May cause slight irritation.                                                    |
| <b>Skin</b>                         | Substance may cause slight skin irritation.                                     |
| <b>Inhalation</b>                   | May cause irritation of respiratory tract.                                      |
| <b>Ingestion</b>                    | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| <b>Chronic Effects</b>              | 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. |
|-------------------------------------|---------------------------------------------------------------------------------------------------------|

|                                                       |                                                                                                                                        |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 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                            |                                                                                                                                        |
| 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

#### Hazardous Components

| 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<br>3 mg/m <sup>3</sup> - TWA                                                                | 10 mg/m <sup>3</sup> - TWAEV                                                                                                                                                                              | 10 mg/m <sup>3</sup> - TWAEV                                                               |
| Kaolin             | 2 mg/m <sup>3</sup> - TWA                                | 2 mg/m <sup>3</sup> - TWA                                                              | 2 mg/m <sup>3</sup> - TWA<br>particulate matter<br>containing no<br>asbestos and less<br>than 1% crystalline<br>silica | 2 mg/m <sup>3</sup> - TWAEV<br>containing no<br>asbestos and less<br>than 1% crystalline<br>silica                                                                                                        | 5 mg/m <sup>3</sup> - TWAEV                                                                |
| Diatomaceous earth | N/E                                                      | 10 mg/m <sup>3</sup> - TWA<br>3 mg/m <sup>3</sup> - TWA                                | 1.5 mg/m <sup>3</sup> - TWA<br>4 mg/m <sup>3</sup> - TWA                                                               | 10 mg/m <sup>3</sup> - TWAEV<br>containing no<br>asbestos and less<br>than 1% crystalline<br>silica<br>3 mg/m <sup>3</sup> - TWAEV<br>containing no<br>asbestos and less<br>than 1% crystalline<br>silica | 6 mg/m <sup>3</sup> - TWAEV                                                                |
| Zinc oxide         | 2 mg/m <sup>3</sup> - TWA<br>10 mg/m <sup>3</sup> - STEL | 10 mg/m <sup>3</sup> - TWA<br>5 mg/m <sup>3</sup> - TWA<br>10 mg/m <sup>3</sup> - STEL | 2 mg/m <sup>3</sup> - TWA<br>10 mg/m <sup>3</sup> - STEL                                                               | 2 mg/m <sup>3</sup> - TWAEV<br>10 mg/m <sup>3</sup> - STEV                                                                                                                                                | 10 mg/m <sup>3</sup> - TWAEV<br>5 mg/m <sup>3</sup> - TWAEV<br>10 mg/m <sup>3</sup> - STEV |
| Silica, mica       | 3 mg/m <sup>3</sup> - TWA                                | 3 mg/m <sup>3</sup> - TWA                                                              | 3 mg/m <sup>3</sup> - TWA                                                                                              | 3 mg/m <sup>3</sup> - TWAEV<br>containing no<br>asbestos and less<br>than 1% crystalline<br>silica                                                                                                        | 3 mg/m <sup>3</sup> - TWAEV                                                                |
| Silica, amorphous  | N/E                                                      | N/E                                                                                    | N/E                                                                                                                    | N/E                                                                                                                                                                                                       | N/E                                                                                        |

#### 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

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)          | 11.25 - 11.35     |
| Specific Gravity           | 1.34 - 1.36       |
| pH                         | Not available     |
| Viscosity (centistokes)    | Not available     |
| Evaporation Rate           | Not available     |
| Vapor Pressure             | Not available     |
| Vapor Density              | Not available     |
| Wt. % Solids               | 50 - 60           |
| Vol. % Solids              | 40 - 50           |
| Wt. % Volatiles            | 40 - 50           |
| Vol. % Volatiles           | 50 - 60           |
| 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

No information available

#### Component

##### Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

LD50 Dermal: > 10000 mg/m<sup>3</sup> (Rabbit)

LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

##### Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

##### Zinc oxide

LD50 Oral: > 8437 mg/kg (Rat)

LC50 Inhalation (Dust): > 5700 mg/m<sup>3</sup> (Rat, 4 hr.)

##### Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat)

LD50 Dermal: 2,000 mg/kg (Rabbit)

LC50 Inhalation (Dust): > 2 mg/L

### Chronic Toxicity

#### Carcinogenicity

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

| Chemical Name    | ACGIH | IARC                                 | NTP | OSHA<br>Carcinogen |
|------------------|-------|--------------------------------------|-----|--------------------|
| Titanium dioxide |       | 2B - Possible<br>Human<br>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

## 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.)

##### 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

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

## 15. REGULATORY INFORMATION

### Canada DSL

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> |
|----------------------|---------------|-----------------------|
| Zinc oxide           | 1314-13-2     | 1 - 5%                |

*This product may contain trace amounts of (other) NPRI Parts 1-4 reportable chemicals. Contact the preparer for further information.*

#### NPRI Part 5

This product contains the following NPRI Part 5 Chemicals:

*This product may contain trace amounts of (other) NPRI Part 5 reportable chemicals. Contact the preparer for further information.*

### 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/iyh-vsv/prod/paint-peinture\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/prod/paint-peinture_e.html).

### **Prepared By**

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

**Revision Date:** 05-Feb-2013  
**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.

K1031B

**End of MSDS**