

Material Safety Data Sheet

Revision Date: 11-Oct-2011

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Product Code Product Class Color ANTI-SLIP COATING WHITE K11601 WATER THINNED PAINT White

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)
Silica, crystalline	14808-60-7	15 - 40%
Titanium dioxide	13463-67-7	10 - 30%
Barium sulfate	7727-43-7	5 - 10%
Glass, oxide	65997-17-3	3 - 7%
Ethylene glycol	107-21-1	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 Skin Inhalation Ingestion	May cause slight irritation. Substance may cause slight skin irritation. May cause irritation of respiratory tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	Repeated contact may cause allergic reactions in very susceptible persons.
	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: 0	Reactivity: 0	PPE: -	
HMIS Lege 0 - Minimal H 1 - Slight Ha 2 - Moderate 3 - Serious H 4 - Severe H * - Chronic H X - Consult y handling inst	Hazard Izard Ə Hazard Hazard Iazard Hazard Your supervisor or S.C).P. for "Special"			

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 choosen 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	
Flash Point Data Flash Point (°F) Flash Point (°C) Flash Point Method Flammability Limits In Air	Not applicable Not applicable Not applicable	
Upper Explosion Limit Lower Explosion Limit	Not applicable Not applicable	
NFPA Health: 1 Flammability: 0 Insta	bility: 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	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.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Silica, crystalline	0.025 mg/m ³ - TWA	0.1 mg/m ³ - TWA	0.025 mg/m ³ - TWA	0.10 mg/m ³ - TWAEV designated substance regulation	0.1 mg/m ³ - TWAEV
Titanium dioxide	10 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWA 3 mg/m ³ - TWA	10 mg/m ³ - TWAEV	10 mg/m³ - TWAEV
Barium sulfate	10 mg/m ³ - TWA	10 mg/m³ - TWA	3 mg/m ³ - TWA	10 mg/m ³ - TWAEV	5 ppm - TWAEV
Glass, oxide	1 fiber/cm3 - TWA 5 mg/m ³ - TWA	1 fibres/cm3 - TWA 5 mg/m ³ - TWA	1 fibre/cm3 - TWA 5 mg/m ³ - TWA	1 fibres/cm3 - TWAEV 5 mg/m ³ - TWAEV	10 mg/m³ - TWAEV
Ethylene glycol	100 mg/m ³ - Ceiling	100 mg/m³ - Ceiling	10 mg/m ³ - TWA 20 mg/m ³ - STEL 100 mg/m ³ - Ceiling 50 ppm - Ceiling	100 mg/m ³ - CEV	127 mg/m ³ - Ceiling 50 ppm - Ceiling

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 (Ibs/gal)	12.5 - 12.6
Specific Gravity	1.49 - 1.52
pH	Not available
Viscosity (centistokes)	Not available
Evaporation Rate	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Wt. % Solids	60 - 70
Vol. % Solids	40 - 50
Wt. % Volatiles	30 - 40
Vol. % Volatiles	50 - 60
VOC Regulatory Limit (g/L)	< 100
Boiling Point (°F)	212
Boiling Point (°F)	212

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°C) Freezing Point (°F) Freezing Point (°C) Flash Point (°F) Flash Point (°C) Flash Point Method Upper Explosion Limit Lower Explosion Limit 100 32 0 Not applicable Not applicable Not available 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

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

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

Barium sulfate LD50 Oral: > 5,000 g/kg (Rat) vendor data

Ethylene glycol LD50 Oral: 4700 mg/kg (Rat) LD50 Dermal: 9530 µg/L (Rabbit)

Chronic Toxicity

Carcinogenicity

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

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Silica, crystalline	A2 - Suspected Human Carcinogen	1 - Human Carcinogen	Known Human Carcinogen	Listed
Titanium dioxide		2B - Possible Human Carcinogen		Listed

- 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

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

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

Ethylene glycol LC50: 8050 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

15. REGULATORY INFORMATION

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

Chemical Name	CAS-No	Weight % (max)
Ethylene glycol	107-21-1	1 - 5%

This product may contain trace amounts of (other) NPRI Parts I-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.

Prepared By

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

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Disclaimer

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End of MSDS