

Material Safety Data Sheet

Revision Date: 18-Jul-2012

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Product Code Product Class Color

PORCH & FLOOR URETHANE ALKYD ENAMEL PASTEL BASE F1121B SOLVENT THINNED PAINT 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)
Stoddard solvent	8052-41-3	15 - 40%
Titanium dioxide	13463-67-7	15 - 40%
Limestone	1317-65-3	10 - 30%
Distillates, petroleum, hydrotreated light	64742-47-8	5 - 10%
Xylene	1330-20-7	1 - 5%
Silica, amorphous	7631-86-9	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	0.25 - 0.5%
Ethyl benzene	100-41-4	0.1 - 0.25%

3. HAZARDS IDENTIFICATION

		DS IDENTIFICA	TION
		gency Overview	
	V	VARNING	
Vapors may be irritating		at, and lungs. May cau bustible material.	use skin irritation and/or dermatitis.
of	clean sand may be	added. Stir often durin	id characteristics are desired, a small amount g application. Isly catch fire if improperly discarded.
Appearance liquid			Odor solvent
Potential Health Effects			
Principal Routes of Exposure	Eye contact, skin	contact and inhalation	
Acute Effects			
Eyes		may cause irritation.	
Skin Inhalation		itation and/or dermations are	tis. irritating to the eyes, nose, throat and lungs
Ingestion	and may cause he central nervous sy Ingestion may cau aspirated into the	adaches, dizziness, c stem effects. se irritation to mucous	drowsiness, unconsciousness, and other s membranes. Small amounts of this product ring ingestion or vomiting may cause mild to
Chronic Effects	Avoid repeated ex	posure	
See Section 11 for additional Toxicological information.			
Aggravated Medical Conditions	None known		
HMIS Health: 1*	Flammability: 2	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 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** If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. **Eye Contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. **Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Inhalation Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. **Notes To Physician** Treat symptomatically Use personal protective equipment **Protection Of First-Aiders**

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Foam, dry powder or water. 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	Combustible material. Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	Yes
Flash Point Data Flash Point (°F) Flash Point (°C) Flash Point Method Flammability Limits In Air Upper Explosion Limit Lower Explosion Limit	107 42 PMCC Not available Not available

NFPA	Health: 1	Flammability: 2	Instability: 0	Special: Not Applicable
<u></u>		· · · · · · · · · · · · · · · · · · ·		

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	Use personal protective equipment. Remove all sources of ignition.				
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.				
Methods For Clean-Up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.				
Other Information	None known				
	7. HANDLING AND STORAGE				
Handling	Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear personal protective equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition.				
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep in properly labeled containers.				

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Stoddard solvent	100 ppm - TWA		290 mg/m ³ - TWA 580 mg/m ³ - STEL	-	100 ppm - TWAEV 525 mg/m ³ - TWAEV

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Titanium dioxide	10 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWAEV	$10 m a / m^3$
	TO HIg/III' - TWA	10 mg/m² - 1 WA		TO MIG/IN - TWAEV	10 mg/m ³ -
		-	3 mg/m ³ - TWA		TWAEV
Limestone	N/E	10 mg/m ³ - TWA	10 mg/m ³ - TWA	N/E	10 mg/m ³ -
			3 mg/m ³ - TWA		TWAEV
			20 mg/m ³ - STEL		
Distillates, petroleum,	N/E	N/E	200 mg/m ³ - TWA	N/E	N/E
hydrotreated light			Skin absorption		
			can contribute to		
			overall exposure.		
Xylene	100 ppm - TWA	100 ppm - TWA	100 ppm - TWA	100 ppm - TWAEV	100 ppm - TWAEV
-	150 ppm - STEL	434 mg/m ³ - TWA		435 mg/m ³ - TWAEV	434 mg/m ³ -
		150 ppm - STEL		150 ppm - STEV	TWAEV
		651 mg/m ³ - STEL		650 mg/m ³ - STEV	150 ppm - STEV
		ooring/in oree			651 mg/m ³ - STEV
Silica amorphous	N/E	NI/E		N/E	v
Silica, amorphous	-	N/E	N/E		N/E
1,2,4-Trimethylbenzene	N/E	N/E	N/E	N/E	N/E
Ethyl benzene	100 ppm - TWA	100 ppm - TWA	100 ppm - TWA	100 ppm - TWAEV	100 ppm - TWAEV
	125 ppm - STEL	434 mg/m ³ - TWA	125 ppm - STEL	435 mg/m ³ - TWAEV	434 mg/m ³ -
		125 ppm - STEL		125 ppm - STEV	TWAEV
		543 mg/m ³ - STEL		540 mg/m ³ - STEV	125 ppm - STEV
					543 mg/m ³ - STEV
					1543 mg/m ³ - STE

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	Long sleeved clothing. Protective gloves.
Respiratory Protection	In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.
Hygiene Measures	Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Odor	solvent
Density (Ibs/gal)	9.95 - 10.05
Specific Gravity	1.19 - 1.21
рН	Not available
Viscosity (centistokes)	Not available
Evaporation Rate	Not available

9.	PHYSICAL AND CHEMICAL PROPERTIES
Vapor Pressure	Not available
Vapor Density	Not available
Wt. % Solids	65 - 75
Vol. % Solids	45 - 55
Wt. % Volatiles	25 - 35
Vol. % Volatiles	45 - 55
VOC Regulatory Limit (g/L)	< 400
Boiling Point (°F)	279
Boiling Point (°C)	137
Freezing Point (°F)	Not available
Freezing Point (°C)	Not available
Flash Point (°F)	107
Flash Point (°C)	42
Flash Point Method	PMCC
Upper Explosion Limit	Not available
Lower Explosion Limit	Not available
	10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions. Hazardous polymerisation does not occur.
Conditions To Avoid	Keep away from open flames, hot surfaces, static electricity and sources of ignition.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors.
Possibility Of Hazardous Reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product

Repeated or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

Component

Stoddard solvent LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3160 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 6.1 mg/L (Rat) <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.)

Limestone

LD50 Oral: 6,450 mg/kg (Rat) vendor data Sensitization: No sensitizing effects known.

Distillates, petroleum, hydrotreated light LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3,000 mg/kg (Rabbit)

<u>Xylene</u> LD50 Oral: 4300 mg/kg (Rat) LD50 Dermal: > 1700 mg/kg (Rabbit) LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.) Sensitization: No sensitizing effects known.

<u>Silica, amorphous</u> LD50 Oral: > 5000 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 2 mg/L

1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat) LC50 Inhalation (Vapor): 18000 mg/m³ (Rat, 4 hr.)

Ethyl benzene LD50 Oral: 3500 mg/kg (Rat) LD50 Dermal: > 5000 mg/kg (Rabbit) LC50 Inhalation (Vapor): 55000 mg/m³ (Rat, 2 hr.) Sensitization: No sensitizing effects known.

Chronic Toxicity

Carcinogenicity

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

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Titanium dioxide		2B - Possible Human Carcinogen		Listed
Ethyl benzene	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	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 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.)

Xylene LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

Ethyl benzene LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

Acute Toxicity to Aquatic Plants

Ethyl benzene EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of in accordance with federal, state, provincial, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.
Empty Container Warning	Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition.

14. TRANSPORT INFORMATION

TDG

Proper Shipping Name	Paint
Hazard Class	3
UN-No	UN1263
Packing Group	III

In Canada, Class 3 flammable liquids may be reclassified as non-regulated for domestic ground transportation if they meet the requirements of TDG General Exemption SOR/2008-34.

ICAO / IATA	Contact the preparer for further information.
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IMDG / IMO Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

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

Chemical Name	CAS-No	Weight % (max)
Xylene	1330-20-7	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	0.25 - 0.5%
Ethyl benzene	100-41-4	0.1 - 0.25%

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:

15. REGULATORY INFORMATION

Chemical Name
Stoddard solvent
Distillates, petroleum, hydrotreated light
Xylene
1,2,4-Trimethylbenzene

CAS-No 8052-41-3 64742-47-8 1330-20-7 95-63-6

Weight % (max) 15 - 40% 5 - 10% 1 - 5% 0.25 - 0.5%

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

B3 Combustible liquid
B6 Reactive flammable material
D2A Very toxic materials
D2B 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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