Material Safety Data Sheet

Revision Date: *07-Jan-2013* **Revision Number:** *2*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **FRESH START EXTERIOR WOOD PRIMER**
Product Code **K10004**
Product Class SOLVENT 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)
Limestone	1317-65-3	30 - 60%
Talc	14807-96-6	10 - 30%
Linseed oil, polymer with pentaerythritol, phthalic anhydride and polymd. linseed oil	68152-95-4	10 - 30%
Distillates, petroleum, hydrotreated light	64742-47-8	10 - 30%
Linseed oil polymerized	67746-08-1	7 - 13 %
Stoddard solvent	8052-41-3	5 - 10%
Titanium dioxide	13463-67-7	5 - 10%
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	0.25 - 0.5%
Silica, crystalline	14808-60-7	0.1 - 0.25%
Ethyl benzene	100-41-4	0.1 - 0.25%
Cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 0.25%

3. HAZARDS IDENTIFICATION

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Emergency Overview

WARNING

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.
Combustible material.

Rags, steel wool or waste soaked with this product may spontaneously 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 Contact with eyes may cause irritation.

Skin May cause skin irritation and/or dermatitis.

Inhalation High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.

Ingestion Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

Chronic Effects Avoid repeated exposure

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:** 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

Protection Of First-Aiders Use personal protective equipment

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)	113
Flash Point (°C)	45
Flash Point Method	PMCC

Flammability Limits In Air

Upper Explosion Limit	Not available
Lower Explosion Limit	Not available

NFPA **Health:** 1 **Flammability:** 2 **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.

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.

DANGER - Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Limestone	N/E	10 mg/m^3 - TWA	10 mg/m^3 - TWA 3 mg/m^3 - TWA 20 mg/m^3 - STEL	N/E	10 mg/m^3 - TWAEV

Talc	2 mg/m^3 - TWA	2 mg/m^3 - TWA	2 mg/m^3 - TWA particulate matter containing no asbestos and less than 1% crystalline silica	2 mg/m^3 - TWAEV containing no asbestos and less than 1% crystalline silica	3 mg/m^3 - TWAEV
Linseed oil, polymer with pentaerythritol, phthalic anhydride and polymd. linseed oil	N/E	N/E	N/E	N/E	N/E
Distillates, petroleum, hydrotreated light	N/E	N/E	200 mg/m^3 - TWA Skin absorption can contribute to overall exposure.	N/E	N/E
Linseed oil polymerized	N/E	N/E	N/E	N/E	N/E
Stoddard solvent	100 ppm - TWA	100 ppm - TWA 572 mg/m^3 - TWA	290 mg/m^3 - TWA 580 mg/m^3 - STEL	525 mg/m^3 - TWAEV	100 ppm - TWAEV 525 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/m^3 - TWAEV
Solvent naphtha, petroleum, medium aliphatic	N/E	N/E	N/E	525 mg/m^3 - TWAEV 140°C Flash aliphatic solvent	N/E
1,2,4-Trimethylbenzene	N/E	N/E	N/E	N/E	N/E
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
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 434 mg/m^3 - TWA 125 ppm - STEL 543 mg/m^3 - STEL	20 ppm - TWA	100 ppm - TWA 125 ppm - STEL	100 ppm - TWAEV 434 mg/m^3 - TWAEV 125 ppm - STEV 543 mg/m^3 - STEV
Cobalt bis(2-ethylhexanoate)	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 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 (lbs/gal)	11.95 - 12.05
Specific Gravity	1.43 - 1.45
pH	Not available
Viscosity (centistokes)	Not available
Evaporation Rate	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Wt. % Solids	75 - 85
Vol. % Solids	60 - 70
Wt. % Volatiles	15 - 25
Vol. % Volatiles	30 - 40
VOC Regulatory Limit (g/L)	< 350
Boiling Point (°F)	275
Boiling Point (°C)	135
Freezing Point (°F)	Not available
Freezing Point (°C)	Not available
Flash Point (°F)	113
Flash Point (°C)	45
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

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)

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

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

Solvent naphtha, petroleum, medium aliphatic
LD50 Oral: > 6240 mg/kg (Rat)
LD50 Dermal: > 3120 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 1400 ppm (Rat, 4 hr.)

1,2,4-Trimethylbenzene
LD50 Oral: 5000 mg/kg (Rat)
LC50 Inhalation (Vapor): 18000 mg/m^3 (Rat, 4 hr.)

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

Ethyl benzene
LD50 Oral: 3500 mg/kg (Rat)
LD50 Dermal: > 5000 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 55000 mg/m^3 (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
Silica, crystalline	A2 - Suspected Human Carcinogen	1 - Human Carcinogen	Known Human Carcinogen	Listed

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Ethyl benzene	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	2B - Possible Human Carcinogen		Listed
Cobalt bis(2-ethylhexanoate)		2B - Possible Human Carcinogen		

- 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."
- Cobalt and cobalt compounds are listed as possible human carcinogens by IARC (2B). However, there is inadequate evidence of the carcinogenicity of cobalt and cobalt compounds in humans.

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

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

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

12. ECOLOGICAL INFORMATION

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.

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:

15. REGULATORY INFORMATION

Chemical Name	CAS-No	Weight % (max)
1,2,4-Trimethylbenzene	95-63-6	0.25 - 0.5%
Ethyl benzene	100-41-4	0.1 - 0.25%
Cobalt bis(2-ethylhexanoate)	136-52-7	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:

Chemical Name	CAS-No	Weight % (max)
Distillates, petroleum, hydrotreated light	64742-47-8	10 - 30%
Stoddard solvent	8052-41-3	5 - 10%
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	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

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

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K10004

End of MSDS