

Material Safety Data Sheet

Revision Date: 03-Jul-2012

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Product Code Product Class Color FRESH START ALKYD RUST INHIBITIVE PRIMER K16325 SOLVENT THINNED PAINT Red

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%
Iron oxide	1309-37-1	10 - 30%
Nepheline syenite	37244-96-5	10 - 30%
Distillates, petroleum, hydrotreated light	64742-47-8	7 - 13 %
Zinc oxide	1314-13-2	3 - 7%
Talc	14807-96-6	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1%
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 irritatin	g to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis. Combustible material.
Rags, steel wool or waste	e soaked with this product may spontaneously catch fire if improperly discarded.
Appearance liquid	Odor solven
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 an	
	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

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions None known				
HMIS	Health: 1*	Flammability: 2	Reactivity: 0	PPE: -
HMIS Legen 0 - Minimal Ha 1 - Slight Haza 2 - Moderate H 3 - Serious Ha 4 - Severe Haz * - Chronic Ha	azard ard Hazard izard zard			

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

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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) Flash Point (°C) Flash Point Method	105 41 PMCC
Flammability Limits In Air Upper Explosion Limit Lower Explosion Limit	Not available Not available
NFPA Health: 1 Flammability: 2 Inst	ability: 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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

waste in a sealed water-filled metal container.

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Stoddard solvent	100 ppm - TWA	100 ppm - TWA	290 mg/m ³ - TWA	525 mg/m ³ - TWAEV	100 ppm - TWAEV
		572 mg/m ³ - TWA	580 mg/m ³ - STEL		525 mg/m ³ -
			_		TWAEV
Iron oxide	5 mg/m³ - TWA	5 mg/m ³ - TWA	10 mg/m ³ - STEL	10 mg/m ³ - TWAEV	5 mg/m ³ - TWAEV
			2 mg/m ³ - STEL	5 mg/m³ - TWAEV	
Nepheline syenite	N/E	N/E	N/E	10 mg/m ³ - TWAEV	N/E

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Distillates, petroleum,	N/E	N/E	200 mg/m ³ - TWA	N/E	N/E
hydrotreated light			Skin absorption		
			can contribute to		
			overall exposure.		
Zinc oxide	2 mg/m ³ - TWA	10 mg/m ³ - TWA	2 mg/m ³ - TWA	2 mg/m ³ - TWAEV	10 mg/m ³ -
	10 mg/m ³ - STEL	5 mg/m ³ - TWA	10 mg/m ³ - STEL	10 mg/m³ - STEV	TWĂEV
		10 mg/m ³ - STEL	Ū		5 mg/m ³ - TWAEV
		-			10 mg/m ³ - STEV
Talc	2 mg/m ³ - TWA	2 mg/m ³ - TWA	2 mg/m ³ - TWA	2 mg/m ³ - TWAEV	3 mg/m ³ - TWAEV
			particulate matter	containing no	
			containing no	asbestos and less	
			asbestos and less	than 1% crystalline	
			than 1% crystalline	silica	
			silica		
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/m³ - STEV	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 (Ibs/gal)	10.65 - 10.75
Specific Gravity	1.27 - 1.29
pH	Not available
Viscosity (centistokes)	Not available

ç	9. PHYSICAL AND CHEMICAL PROPERTIES
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)	< 450
Boiling Point (°F)	282
Boiling Point (°C)	139
Freezing Point (°F)	Not available
Freezing Point (°C)	Not available
Flash Point (°F)	105
Flash Point (°C)	41
Flash Point Method	PMCC
Upper Explosion Limit	Not available
Lower Explosion Limit	Not available

10. STABILITY AND REACTIVITY

Chemical	Stability
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Conditions To Avoid

Incompatible Materials

Hazardous Decomposition Products

Possibility Of Hazardous Reactions

Stable under normal conditions. Hazardous polymerisation does not occur.

Keep away from open flames, hot surfaces, static electricity and sources of ignition.

Incompatible with strong acids and bases and strong oxidizing agents.

Thermal decomposition can lead to release of irritating gases and vapors.

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)

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LC50 Inhalation (Vapor): > 6.1 mg/L (Rat)

Iron oxide LD50 Oral: > 5000 mg/kg (Rat) vendor data

Nepheline syenite Sensitization: No sensitizing effects known.

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

Zinc oxide LD50 Oral: > 8437 mg/kg (Rat) LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

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
	A3 - Confirmed	2B - Possible		Listed
Ethyl benzene	Animal	Human		
	Carcinogen with	Carcinogen		
	Unknown	-		
	Relevance to			
	Humans			
		2B - Possible		
Cobalt bis(2-ethylhexanoate)		Human		
		Carcinogen		

• 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

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	111

14. TRANSPORT INFORMATION

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)
Zinc oxide	1314-13-2	3 - 7%
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1%
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)
Stoddard solvent	8052-41-3	15 - 40%
Distillates, petroleum, hydrotreated light	64742-47-8	7 - 13 %
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1%

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.

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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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