

Material Safety Data Sheet

Revision Date: 11-Apr-2012 Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name BENWOOD INTERIOR WOOD FINISH POLYURETHANE FLAT

Product Code F42400

Product Class SOLVENT THINNED PAINT

Color Clear

Manufacturer Emergency Telephone Number(s)

Benjamin Moore & Co. CANUTEC: 613-996-6666

101 Paragon Drive Montvale, NJ 07645 Phone: 201-573-9600 www.benjaminmoore.com

2. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Stoddard solvent	8052-41-3	15 - 40%
Linseed oil	8001-26-1	10 - 30%
1,2,4-Trimethylbenzene	95-63-6	3 - 7%
Solvent naphtha, petroleum, light aromatic	64742-95-6	3 - 7%
Xylene	1330-20-7	1 - 5%
Ethyl benzene	100-41-4	1 - 5%
1,3,5-Trimethylbenzene	108-67-8	1 - 5%
Cumene	98-82-8	1 - 5%
Ethanol	64-17-5	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

EyesContact 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

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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: 2* 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

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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

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)

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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) 104
Flash Point (°C) 40
Flash Point Method PMCC

Flammability Limits In Air

Upper Explosion LimitNot availableLower Explosion LimitNot available

NFPA Health: 2 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 PrecautionsUse 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

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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

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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/m³ -
					TWAEV
Linseed oil	N/E	N/E	N/E	N/E	N/E
1,2,4-Trimethylbenzene	N/E	N/E	N/E	N/E	N/E

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Solvent naphtha, petroleum, light aromatic	N/E	N/E	N/E	N/E	N/E
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 434 mg/m³ - TWA 150 ppm - STEL 651 mg/m³ - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWAEV 435 mg/m³ - TWAEV 150 ppm - STEV 650 mg/m³ - STEV	100 ppm - TWAEV 434 mg/m³ - TWAEV 150 ppm - STEV 651 mg/m³ - STEV
Ethyl benzene	100 ppm - TWA 125 ppm - STEL	100 ppm - TWA 434 mg/m³ - TWA 125 ppm - STEL 543 mg/m³ - STEL	100 ppm - TWA 125 ppm - STEL	100 ppm - TWAEV 435 mg/m³ - TWAEV 125 ppm - STEV 540 mg/m³ - STEV	100 ppm - TWAEV 434 mg/m³ - TWAEV 125 ppm - STEV 543 mg/m³ - STEV
1,3,5-Trimethylbenzene	N/E	N/E	N/E	N/E	N/E
Cumene	50 ppm - TWA	246 mg/m ³ - TWA 50 ppm - TWA	25 ppm - TWA 75 ppm - STEL	245 mg/m³ - TWAEV 50 ppm - TWAEV Absorption through skin, eyes, or mucous membranes	246 mg/m³ - TWAEV 50 ppm - TWAEV
Ethanol	1000 ppm - STEL	1000 ppm - TWA 1880 mg/m³ - TWA	1000 ppm - TWA	1000 ppm - TWAEV 1900 mg/m³ - TWAEV	1000 ppm - TWAEV 1880 mg/m³ - TWAEV

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
Skin Protection

Respiratory Protection

Safety glasses with side-shields.

Long sleeved clothing. Protective gloves.

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) 7.75 - 7.85
Specific Gravity 0.92 - 0.94
PH Not available
Viscosity (centistokes) Not available
Evaporation Rate Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

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Not available **Vapor Pressure** Not available **Vapor Density** Wt. % Solids 60 - 70 55 - 65 Vol. % Solids Wt. % Volatiles 30 - 40 Vol. % Volatiles 35 - 45 **VOC Regulatory Limit (g/L)** <350 **Boiling Point (°F)** 313 **Boiling Point (°C)** 156

Freezing Point (°F) Not available Freezing Point (°C) Not available

Flash Point (°F)
Flash Point (°C)
Flash Point Method
Upper Explosion Limit
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)

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1,2,4-Trimethylbenzene

LD50 Oral: 5000 mg/kg (Rat)

LC50 Inhalation (Vapor): 18000 mg/m³ (Rat, 4 hr.)

Solvent naphtha, petroleum, light aromatic

LD50 Oral: 8400 mg/kg (Rat)

Xylene

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.

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.

1,3,5-Trimethylbenzene

LD50 Oral: 5,000 mg/kg (Rat)

LC50 Inhalation (Vapor): 24,000 mg/m³ (Rat, 4 hr.)

Cumene

LD50 Oral: > 1400 mg/kg (Rat) LD50 Dermal: 12300 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 39000mg/kg (Rat, 4 hr.)

Ethanol

LD50 Oral: 7060 mg/kg (Rat)

LC50 Inhalation (Vapor): 20000 ppm (Rat, 10 hr.)

Chronic Toxicity

Carcinogenicity

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

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

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Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
	A3 - Confirmed			
Ethanol	Animal			
	Carcinogen with			
	Unknown			
	Relevance to			
	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

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

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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 (Mixture)

Hazard Class 3

UN-No UN1263
Packing Group

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 / IMOContact 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)
1,2,4-Trimethylbenzene	95-63-6	3 - 7%
Xylene	1330-20-7	1 - 5%
Ethyl benzene	100-41-4	1 - 5%
1,3,5-Trimethylbenzene	108-67-8	1 - 5%
Cumene	98-82-8	1 - 5%
Ethanol	64-17-5	0.1 - 0.25%

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

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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%
1,2,4-Trimethylbenzene	95-63-6	3 - 7%
Solvent naphtha, petroleum, light aromatic	64742-95-6	3 - 7%
Xylene	1330-20-7	1 - 5%
Ethanol	64-17-5	0.1 - 0.25%

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 Product Stewardship Department

Benjamin Moore & Co.

360 Route 206 - P.O. Box 4000

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Revision Summary No information available

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Disclaimer

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End of MSDS