



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200



WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS Class D-2B: Material causing other toxic effects (TOXIC).

HCS Class: Flammable liquid having a flash point lower than 37.8°C (100°F). HCS Class: Irritating substance.

WHMIS (Pictograms)

WHMIS (Classification)

HCS

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Marathane 350	Code	698
Synonym	Polyurethane Finish for Wood Floors	CAS #	Mixture.
Chemical Family	Mixture	Validation Date	5/7/2009
Chemical Formula	Not applicable.	Print Date	5/7/2009
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (800) 333-2156	In Case of Emergency	CHEMTREC (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.		
DSL/ NDSL	All components listed unless noted elsewhere on this MSDS		

Protective Clothing



Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Mineral Spirits	64742-88-7	25 - 50	ACGIH TLV (United States). TWA: 100 ppm 8 hour(s).	Not established
Aromatic Naptha	64742-95-6	1 - 5	OSHA PEL (United States). TWA: 100 ppm 8 hour(s).	ORAL (LD50): Acute: 4700 mg/kg [Rat]. DERMAL (LD50): Acute: >4 mg/kg [Rat]. VAPOR (LC50): Acute: 3670 ppm 8 hour(s) [Rat].
Oil Modified Urethane Resin	N/A	40 - 70	Not established	Not established
Parachlorobenzotrifluoride	98-56-6	5 - 10	Not available.	Not available.
Tert-Butyl acetate	540-88-5	5 - 10	200 ppm ACGIH	Not established

Section 3. Hazards Identification

Potential Acute Health Effects	This product is an eye irritant. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. May cause dizziness, nausea.
Potential Chronic Health Effects	Repeated or prolonged exposure to the substance can produce nervous system damage. Repeated or prolonged exposure to the substance can produce kidney damage.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.
Skin Contact	Remove contaminated clothing and shoes. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap.
Inhalation	Move affected person to fresh air. If not breathing, give artificial respiration. Call a physician.
Ingestion	Do not induce vomiting. Call a poison control center or doctor immediately for treatment advice.

Section 5. Fire Fighting Measures

Products of Combustion	Not determined.
Fire Fighting Media and Instructions	Foam, CO2, or dry chemical.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	Heated Containers may burst.

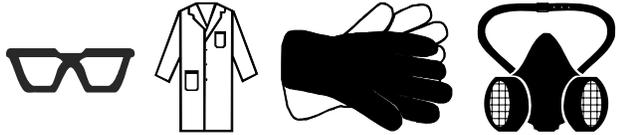
Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material.
Large Spill and Leak	Eliminate all ignition sources. Wear suitable protective clothing, gloves and eye/face protection. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain. Dispose of according to all federal, state and local applicable regulations.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Gloves (impervious). Boots. Wear appropriate respirator when ventilation is inadequate. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Section 7. Handling and Storage

Precautions	Store and use away from heat, sparks, open flame, or any other ignition source. No smoking. Avoid breathing vapors or spray mists. Do not ingest. After handling, always wash hands thoroughly with soap and water.
Incompatibility	Strong oxidizers. acids alkalis
Storage	Keep away from heat, sparks and flame. Keep in a cool and ventilated area away from combustible materials. Inside storage should be in a standard flammable liquids storage warehouse, room or cabinet. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use only in well-ventilated areas. Local exhaust ventilation should be provided.
Personal Protection	
<i>Eyes</i>	Safety glasses.
<i>Body</i>	Long Sleeves and pants to avoid skin contact.
<i>Respiratory</i>	Vapor respirator. Approved/certified respirator with organic vapor cartridges.
<i>Hands</i>	Gloves.
Protective Clothing (Pictograms)	
Exposure Limits	See Section 2 For Applicable Exposure Limits

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid	Odor	Pungent,fruity.
Molecular Weight	Not applicable.	Taste	Not available.
pH	N/A	Color	Clear.
Boiling/Condensation Point	139 - 313 F.		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	0.911 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	Heavier than air.		
Volatility	>45%		
VOC	350 (g/l).		
Evaporation Rate	<1		
Dispersion Properties	not available		
Solubility	Insoluble		
The Product is:	FLAMMABLE.		
Auto-ignition Temperature	Not available.		
Flash Points	Closed cup: 82°F.		
Flammable Limits	LOWER: 0.5% UPPER: 10.5%		
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames, sparks, heat, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis.		
Explosion Hazards in Presence of Various Substances	Containers may explode when heated		

Section 10. Stability and Reactivity Data

Stability	Stable under recommended storage and handling conditions (see section 7).
Incompatibility with Various Substances	Strong oxidizers. acids alkalis
Hazardous Decomposition Products	Not determined.

Section 11. Toxicological Information

Routes of Entry Inhalation. Ingestion. Eye Contact. Skin Contact.

Toxicity to Animals Not available.

Acute Effects on Humans

Eyes Irritating to eyes. Inflammation of the eye is characterized by redness, watering, and itching.

Skin Irritating to skin. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

Inhalation Irritating to respiratory system. May cause headache, dizziness.

Ingestion Irritating to mouth, throat and stomach. Aspiration hazard if swallowed- can enter lungs and cause damage.

Chronic Effects on Humans Repeated or prolonged exposure to the substance can produce nervous system damage. Repeated or prolonged exposure to the substance can produce kidney damage.

Special Remarks on Toxicity to Animals No additional remark.

Special Remarks on Chronic Effects on Humans No additional remark.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Not determined.

Toxicity of the Products of Biodegradation Not determined.

Special Remarks on the Products of Biodegradation No additional remark.

Section 13. Disposal Considerations

Waste Information Hazardous waste.

Waste Stream Hazardous

Section 14. Transport Information

DOT (U.S.A) (Pictograms)



TDG Classification 3



PIN UN, Proper Shipping Name, PG Shipping name: Paint UN 1263 PG III

Maritime Transportation Not available.

Special Provisions for Transport

Not available.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS Class D-2B: Material causing other toxic effects (TOXIC).



Regulatory Lists No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications	HCS (U.S.A.)	HCS Class: Flammable liquid having a flash point lower than 37.8°C (100°F). HCS Class: Irritating substance.
	USA Regulatory Lists	SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Mineral Spirits, Aromatic Naphtha, Tert-Butyl acetate, Parachlorobenzotrifluoride: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

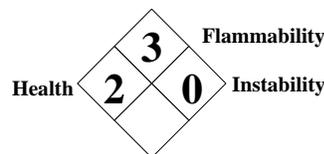
DSD (EEC)

International Regulations Lists No products were found.

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		3
Physical Hazard		0

National Fire Protection Association (U.S.A.)



The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Validated by LMorsch on 5/7/2009.

Verified by LMorsch.

Printed 5/7/2009.

Information Contact

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.