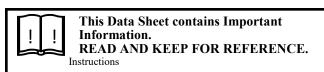
Material Safety Data Sheet



BRIWAX Int'l, Inc.



BY APPOINTMENT TO H.M. QUEEN ELIZABETH II MANUFACTURERS OF FRENCH POLISHES & LAQUERS J W BOLLOM & CO. LTD. T/A HENRY FLACK (1860) LTD

1.0 CHEMICAL PROD-

UCT AND COMPANY IDENTIFICATION

Product Name: BRIWAX Sanding Sealer

Product Code: 1122(I2) **Supplier:**

BRIWAX International Inc.

P.O. Box 5662 Helena MT 59604 1-800-5-BRIWAX

1-800-5-BRIWAX Fax: 972-867-8960

Transportation Emergencies: Call Chemtrec, 1-800-424-9300

Revision Number: 8/2000 - I Intended use: Furniture sealer Description: Resin in solvent Chemical Family: Resin in solvent

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%	CAS#	OSHA Exposure Limits
Ethanol	40-70	64-17-5	1000 ppm TWA; 1900 mg/m3TWA
n-Propanol	10-30	71-23-8	200 ppm TWA; 500 mg/m3/TWA
Methanol	0.5-1.5	67-56-1	200 ppm TWA; 260 mg/m3/TWA

3.0 HAZARDS IDENTIFICATION

Emergency Overview	Moderate to sever eye irritant. Causes mild skin irritation. Moderate respiratory tract irritant. Moderate gastrointestinal tract irritant. Highly Flammable.
Routes of Entry	Inhalation; Ingestion; Skin contact; Eye contact, Absorption.
Target Organs Potentially Affected by Exposure:	Eyes; Blood; Liver; Skin/ Nervous System; Respiratory Tract; Central Nervous System Stimulation; Digestive Tract
Chemical Interactions that Change Toxicity:	No chemical interaction known to affect toxicity.
Medical Conditions Aggravated:	Eye disease; Liver disease; Skin disease including eczema an sensitization; Respiratory disease including asthma and bronchitis; Digestive tract disease

3.0 HAZARDS IDENTIFICATION CONT'D

Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.
Inhalation Toxicity	Harmful!! Can cause systemic damage (see "Target Organs") Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness.
Skin Contact	Can cause minor skin irritation, defatting and dermatitis.
Skin Absorption	Harmful if absorbed through the skin. May cause severe irritation and systemic damage. Contains methanol. Upon prolonged or repeated exposure, may cause deterioration of the optic nerve if large quantities are absorbed through the skin. Repeated absorption of large quantities may lead to blindness.
Eye Contact	Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing or reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.
Ingestion Irritation	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.
Ingestion Toxicity	Toxic if swallowed. May cause target organ failure and/or death. Upon ingestion of a large quantity of this material, visual disturbances may occur. Onset of the response may be delayed.

Long-Term (Chronic) Health Effects

Carcinogenicity	None of the substances have been shown to cause cancer in long term animal studies. Not a carcinogen according to NTP, IARC, or OSHA
Reproductive and Developmental Toxicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagencity	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

4.0 FIRST AID MEASURES

Inhalation	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eyes	Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops or persists.
Ingestion	Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

5.0 FIRE FIGHTING MEASURES

<u>Flammability</u>	Highly Flammable
<u>Summary:</u> Extinguishing Media	Alcohol foam; Carbon dioxide; Dry chemical
Fire and/or Explosion Hazards	Vapors may be ignited by sparks, flames, or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Empty containers that retain product residue (liquid, solid, sludge, or vapor) can be dangerous. Do not pressurize cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions ban potentially cause an explosion that may lead to injury or death.
Fire Fighting Methods and Protection	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
Hazardous Combustion Products	Carbon dioxide; Carbon monoxide
Flash Point	13C; 55F
Autoignition Temperature, deg C	440
Upper Flammable/Explosive Limit, % in air:	14
Lower Flammable/Explosive Limit, % in air	2.2

6.0 ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
Methods for Clean-up	Prevent the spread of any spill to minimize harm to human health and the environment is safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

7.0 handling and storage

Handling Technical Measures and Precautions	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after handling. Avoid contact with material. Ground and bond containers when transferring material. Keep in air-tight containers—material is hygroscopic. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse. Use spark-proof tools and explosion-proof equipment.

7.0 HANDLING AND STORAGE CONT'D

g	Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container closed when not in use.	
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8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION Control Parameters

Engineering Measures	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
Respiratory Protection	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if room ventilation is not available or sufficient to eliminate symptoms. Follow a respiratory protection program that meets 29 CFR 190.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator.
Eye Protection	Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.
Skin Protection	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene.
Gloves	Butyl rubber, Neoprene, Nitrile

Chemical Name ACGIH TLV-TWA ACGIH STEL

 Ethanol
 1000 ppm TWA; 1880 mg/m3 TWA

 N-Propyl alcohol
 200 ppm TWA; 492 mg/m3 TWA
 250 ppm STEL; 614 mg/m3 STEL

 Methanol
 200 ppm TWA; 262 mg/m3 TWA
 250 ppm STEL; 328 mg/m3 STEL

9.0 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless to pale amber
Odor	Mild
рН	Not applicable
Solubility in Water	Moderate; 50-99%
Octanol/Water Partition Coefficient	-0.3
Vapor Density	Heavier than air. Vapors that evolve from this product will tend to settle and accumulate near the floor.
Volatile Organic Chemicals	651 g/I

9.0 PHYSICAL AND CHEMICAL PROPERTIES CONT'D

Boiling Point	78 deg. C
Melting Point	-114 deg. C
Specific Gravity	0.792 g/ml
Bulk Density	6.609 lb/gal

10.0 STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to Avoid	Sparks, open flame, other ignition sources, and elevated temperatures
Materials to Avoid/Chemical Incompatibility	Strong oxidizing agents
Hazardous Decomposition Products	Carbon dioxide; Carbon monoxide

11.0 TOXICOLOGICAL INFORMATION

Ingestion: Estimated to be 0.5—2.0 g/kg; moderately toxic Inhalation: Estimated to be >5000 ppm; practically non-toxic. Absorption: Estimated to be 2.0-5.0g/kg; slightly toxic

Component Toxicology Data (NIOSH):

Component Toxicology Data (110511).				
Chemical Name	CAS Number	LD50/LC50		
Ethyl alcohol	64-17-5	Inhalation LC50 Rat: 20000 ppm/10H; Inhalation LC50		
•		Mouse: 39 gm/m3/4H; Oral LD50 Rat: 7060 mg/kg;		
		Oral LD50 Mouse: 3450 mg/kg		
Propyl alcohol	71-23-8	Inhalation LC50 Mouse: 48 gm/m3; Oral LD50 Rat:		
• •		1870 mg/kg; Oral LD50 Mouse: 6800 mg/kg;		
		Dermal LD50 Rabbit: 4060 mg/kg		
Methanol	67-56-1	Inhalation LC50 Rat: 64000 ppm/4H; Oral LD50 Rat:		
		5628 mg/kg; Oral LD50 Mouse: 7300 mg/kg; Dermal		
		LD50 Rabbit: 15800 mg/kg		

LD50 Rabbit : 15800 mg/kg

12.0 ECOLOGICAL INFORMATIONN

Overview	Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/ or wildlife.
Mobility	No Data
Persistence	No Data
Bioaccumulation	Bioconcentration is not expected to occur.
Degradability	Biodegrades quickly.

13.0 DISPOSAL CONSIDERATION

Waste Description for Spent Product	Spent or discarded material is hazardous waste.
Disposal Methods	Dispose of by incineration following Federal, State, Local and Provincial regulations.
EPA Waste Code(s)	If discarded this product is considered a RCRA ignitable waste, D001.
Substances subject to EPA Land Ban	U154– Methyl alcohol.

14.0 TRANSPORATION INFORMATION

DOT Basic Description: DOT & IATA : PAINT REALTED MATERIAL, 3, UN1263, PG II, LABEL REQUIRED: FLAMMABLE LIQUID.

15.0 REGULATORY INFORMATION

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS#	Regulation	%Range
Methanol	67-56-1	CERCLA	0.5-1.5
Methanol	67-56-1	SARA 313	0.5-1.5
Ethanol		Prop 65	

Substances known to the State of California to cause cancer or reproductive harm: Ethanol.

16.0 ADDITIONAL INFORMATION

Other Info	Prepared by Thomas J. Lewis Ph.D.
Disclaimer	The information contained in this safety data sheet is provided in accordance with the requirements of OSHA Hazard Communication (29 CFR 1910.1200). The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written instructions. As the specific conditions of use of the product are outside of the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this Material Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environ-
	mental aspects of the product and should not be construed as any guarantee of technical performance as suitability for particular applications.