

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (as Used on Label and List)
PVA Marking Varnish

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's name Museum Services Corporation	Emergency Telephone Number 651-450-8954
Address (Number, Street, City, State and ZIP Code) 385 Bridgepoint Way South Saint Paul, MN 55075	Telephone Number for Information 651-450-8954
	Date Prepared 12/07/2022
	Signature of Preparer (optional)

Section II—Hazardous Identification

Emergency Overview:

This material is HAZARDOUS by OSHA Hazard Communication definition. Flammable Liquid. Material can burn with little or no visible flame. May be irritating to the eyes, skin, and respiratory system. May cause central nervous system depression.

OSHA Hazards:

Flammable liquid, Target Organ Effect, Irritant

Target Organs:

Central nervous system, Heart, Liver

Label elements

Hazard pictograms



Signal word: **DANGER!**

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

Precautionary statement(s)

P501 Dispose of contents and container to an approved waste disposal plant.

P240 Ground/bond container and receiving equipment.

P337 + P313 If eye irritation persists: Get medical attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P233 Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P243 Take precautionary measures against static discharge.

P241 Use explosion-proof electrical, ventilating, and lighting equipment.

P242 Use only non-sparking tools.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye and face protection.

GHS Classification(s)

Eye irritation (Category 2)

Flammable Liquids (Category 2)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Other hazards

no data available

Section III—Composition/Information on Ingredients

Component	CASRN	Concentration	
Polyvinylacetate	108-05-4	15%	
Ethyl Alcohol	64-17-5	75%	
Distilled Water	7732-18-5	10%	

Section IV—First Aid Measures**General advice**

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Immediately flush affected area with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse. Contact a doctor. If irritation persists, get medical attention.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

Note to Physician:

Symptoms vary with alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05- 0.15%. Approximately 25% of individuals show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol; 50-95% of individuals are clinically intoxicated at these levels. Severe poisoning occurs when the blood is ethanol level is 0.3- 0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids.

Section V—Fire and Explosion Hazard Data

Extinguishing Media - SMALL FIRE: Use dry chemicals, CO₂, water spray or alcohol-resistant foam. **LARGE FIRE:** Use water spray, water fog or alcohol-resistant foam. Cool all affected containers with flooding quantities of water.

Special Fire Fighting Procedures – no data available

Unusual Fire and Explosion Hazards -Vapors can travel to a source of ignition and flash back. Heated material can form flammable or explosive vapors with air. Closed containers may rupture via pressure build-up when exposed to fire or extreme heat. During a fire, irritating and highly toxic gases and/or fumes may be generated during combustion or decomposition.

Advice for firefighters (Fire Fighting Procedures): EXPLOSION HAZARD. Fight advanced fires from a protected location. Cool closed containers exposed to fire with water spray. Remain upwind. Avoid breathing smoke.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may only be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always

stay away from tanks engulfed in fire.

Section VI—Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

Environmental precautions: WARNING: KEEP SPILLS AND CLEANING RUNOFFS OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER.

Methods and materials for containment and cleaning up: Eliminate all ignition sources. Evacuate personnel to safe areas. Ventilate the area. Floor may be slippery; use care to avoid falling. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal. No sparking tools should be used. Avoid breathing vapor. NOTE: Spills on porous surfaces can contaminate groundwater.

Section VII—Handling and Storage

Precautions for safe handling: Use non-sparking tools and grounding cables when transferring. Wash after handling and shower at end of work period. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue, follow all MSDS and label warnings even after container is emptied.

Conditions for safe storage: Avoid temperature extremes during storage; ambient temperature preferred. Store away from excessive heat (e.g. steam pipes, radiators), from sources of ignition and from reactive materials. Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Store out of direct sunlight in a cool place. Keep containers tightly closed in a cool, well-ventilated place. Avoid all ignition sources. Ground all metal containers during storage and handling.

Section VIII—Exposure Control /Personal Protection

Respiratory Protection (*Specify Type*): A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information.

Engineering Controls: Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Protective Gloves: Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Nitrile rubber. Butyl-rubber. Solvent-resistant gloves. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Eye Protection: Chemical resistant goggles must be worn. Eye protection worn must be compatible with respiratory protection system employed.

Section IX—Physical and Chemical Properties

Appearance (physical state, color, etc.)	Liquid. Colorless liquid
Odor	Sweet. Alcohol-like
Odor threshold	No Data Available.
pH	No Data Available.
Freezing point	-114 °C (-173 °F)
Initial boiling point and boiling range	78 °C (173 °F)
Flash point	13 °C (55 °F) - closed cup
Evaporation rate	Specific data not available - expected to be rapid.
Flammability (solid, gas)	Flammable
Upper / Lower flammability or explosive limits	3.3 %(V) / 19 %(V)

Vapor pressure	59.5 hPa (44.6 mmHg) at 20 °C (68 °F)
Vapor Density	1.6
Relative Density	0.785 g/mL at 25 °C (77 °F)
Solubility(ies)	completely soluble
Partition coefficient n-octanol/water(ies)	No Data Available.
Auto-ignition temperature	363 °C (685 °F)
Decomposition temperature	Not pertinent
Formula	(ETHANOL) C ₂ H ₆ O (AYAF) CH ₂ :CHOCOCH ₃
Molecular Weight	(ETHANOL) 46.07 g/mol (AYAF) Polymer – No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

Section X—Stability and Reactivity

Chemical Stability	Stable under recommended storage conditions.	
Possibility of hazardous reactions	Vapors may form explosive mixture with air.	
Conditions to avoid (e.g., static discharge, shock or vibration)	Heat, flames, and sparks. Extreme temperatures and direct sunlight.	
Incompatible materials	Alkali metals, Ammonia, Oxidizing agents, Peroxides, Strong Inorganic Acids	
Hazardous decomposition products	None known	
Hazardous decomposition products formed under fire conditions.	Carbon oxides	

Section XI—Toxicological Information

Toxicological information appears in this section when such data is available.

Signs and Symptoms of Exposure

Central nervous system depression, narcosis, damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Product Summary:

Ethanol is not toxic by OSHA standards. Coingestion of sedative hypnotics or tranquilizers can increase the toxic effects of ethanol.

This product contains residual vinyl acetate monomer. Repeated exposure to high concentrations of vinyl acetate vapors (approximately 200 ppm and greater) produced evidence of respiratory tract irritation in laboratory animals.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:

Life-time exposure to high vapor concentrations (600 ppm) of vinyl acetate caused tumors of the respiratory tract of laboratory animals; this response possibly being associated with the irritant effect. No carcinogenic effects were observed when laboratory animals received vinyl acetate in drinking water (up to 0.5%) with exposure taking place from the period of embryofetal development and continuing throughout a major portion of their life span. There is no evidence that vinyl acetate has caused cancer in humans. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of vinyl acetate below the recommended exposure limit. Male rats receiving vinyl acetate at high concentrations in drinking water (0.5%) for two generations possibly demonstrated a decreased ability to produce offspring.

COMPONENTS INFLUENCING TOXICOLOGY:

Acrylic polymer(s)

Acute oral toxicity

Single dose oral LD₅₀ has not been determined.

Acute dermal toxicity

The dermal LD₅₀ has not been determined.

Acute inhalation toxicity

The LC₅₀ has not been determined.

Acute Toxicity:

LC₅₀ (inhl) Rat 20000ppm 10 hrs.

LC50 (Oral) Rat 7060mg/Kg BWT

LDLo (Oral) Human 1400 mg/Kg BWT

Irritation:

Eyes (ETHANOL)

Eye exposure to Ethanol generally causes transient pain, irritation, and reflex lid closure. A foreign-body sensation may persist for one to two days.

Vapors produce transient stinging and tearing, but no apparent adverse effects. Transiently impaired perception of color may occur with acute ingestion or chronic alcoholism. Standard Draize eye test (rabbit) - Dose: 500 mg Reaction: Severe Dose: 500 mg/24 hrs Reaction: Mild

Skin

Standard Draize skin test (rabbit) - Dose: 20 mg/24 hrs Reaction: Moderate Repeated exposure may cause skin dryness or cracking.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Section XII—Ecological Information

Ecotoxicological information appears in this section when such data is available.

General Information

There is no data available for this product.

Toxicity

AYAF

Acute toxicity to fish

No relevant data found.

Ethyl Alcohol

Acute Fish Toxicity

LC50 / 96 HOUR Oncorhynchus mykiss (rainbow trout) > 10,000 mg/l

LC50 / 96 HOUR Pimephales promelas (fathead minnow) > 13,400 mg/l

Acrylic polymer(s)

Biodegradability: No relevant data found.

Ethyl Alcohol

Biodegradability: Biodegradation is expected.

Bioaccumulative potential

AYAF

Bioaccumulation: No relevant data found.

Ethyl Alcohol

Bioaccumulation: Bioaccumulation is unlikely

Section XIII—Disposal Considerations

Disposal methods: Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations. (See 40 CFR 268)

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section XIV—Transport Information

DOT

Proper shipping name Resin solution

UN number UN 1866

Class 3

Packing group II

Classification for SEA transport (IMO-IMDG):

Proper shipping name RESIN SOLUTION

UN number UN 1866

Class 3

Packing group II

Marine pollutant No
Transport in bulk
according to Annex I or II
of MARPOL 73/78 and the
IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Proper shipping name Resin solution

UN number UN 1866

Class 3

Packing group II

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section XV—Regulatory Information

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Chronic Health Hazard

Fire Hazard

CERCLA

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

Massachusetts Right To Know Components - Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Pennsylvania Right To Know Components - Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

New Jersey Right To Know Components - Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

California Prop 65 Components - WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (ETHYL ALCOHOL) CAS No. 64-17-5 Revision Date: December 11, 2009

Section XVI—Other Information

Hazard Rating System

HMIS

Health	Flammability	Physical Hazard
2	3	0

Revision

Version: 1.0

Information Source and References

This SDS is from information supplied by internal references within our company.

Museum Services Corporation urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that their activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe

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