

**MATERIAL SAFETY DATA SHEET**

**NFPA RATING:** Health = 1 Flammability = 0 Reactivity = 0

**HMIS RATING:** Health = 1 Flammability = 0 Reactivity = 0

**SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (0295B)**

**Manufacturer's Name:** HILLYARD INDUSTRIES

**Product Name:** HIL-SHEEN

**Address:** 302 North Fourth Street  
St. Joseph, MO 64501

**Date Prepared:** February 6, 1995

**Prepared by:** Regulatory Affairs Department

**Emergency Telephone No.:** (800)-424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

**Other information calls:** (816) 233-1321 (Ext. 303)

**SECTION II -- INGREDIENTS/IDENTITY INFORMATION**

Components (Specific Chemical Identity: Common Name(s))	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Morpholine (1)	110-91-8	20 ppm	20 ppm	STEL = 30	1-2
Water	7732-18-5	none	none	N/A	---
Hydrocarbon wax	64743-00-6	not established	not established	N/A	---
#1 prime carnauba wax	8015-86-9	not established	not established	N/A	---
Ethene, homopolymer, oxidized	68441-17-8	not established	not established	N/A	---
Modified rosin ester	Unknown to Hillyard	not established	not established	N/A	---

(1) Regulated by OSHA and the following states: CT, FL, IL, LA, MA, NJ, PA, RI.

**SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS**

**Boiling Point:** 215°F corr. **Specific Gravity (H<sub>2</sub>O = 1):** 25°F = 1.00 39°F = 1.00  
**Vapor Pressure (mm Hg.):** 20.8 **Percent Volatile by Volume (%):** 87.6 (average)  
**Vapor Density (AIR = 1):** 0.6 **Evaporation Rate (ethyl ether = 1):** slower than 1  
**Solubility in Water:** appreciable **Appearance and Odor:** white-tan emulsion; non-objectionable odor

**SECTION IV -- FIRE AND EXPLOSION HAZARD DATA**

**Flash point:** None (Tag Closed Cup) **Flammable Limits:** LEL = N/A UEL = N/A  
**Extinguishing Media:** N/A  
**Special Fire Fighting Procedures:** None  
**Unusual Fire and Explosion Hazards:** None

**SECTION V -- PHYSICAL HAZARDS**

**Stability:** Stable **Conditions to Avoid:** N/A  
**Incompatibility (Materials to Avoid):** Contact of morpholine with strong acids will cause violent spattering.  
**Hazardous Decomposition Products or Byproducts:** Toxic gases and vapors (such as oxides of nitrogen and carbon monoxide) may be released in a fire involving morpholine.  
**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** N/A

**SECTION VI -- HEALTH HAZARD DATA**

**Routes of entry:** Inhalation? Yes Skin? Yes Ingestion? Yes (Morpholine)

**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Morpholine: May irritate the eyes, nose, throat, lungs and skin.
2. Morpholine: Effects of long term overexposure -- may cause skin irritation.

**Chemical listed as Carcinogen or Potential Carcinogen:**

**National Toxicology Program =** No **I.A.R.C. Monographs =** No **OSHA =** No

This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater or equal to 0.1%.

## SECTION VI -- HEALTH HAZARD DATA cont.

**Signs and Symptoms of Exposure:** Morpholine: Irritated respiratory tract; causes irritation to skin and eyes; toxic effects due to skin absorption are possible.

**Medical Conditions Generally Aggravated by Exposure:** None known

**Emergency and First Aid Procedures:** Eyes: Flush with water for 15 minutes; if irritation persists get medical attention. Skin: Wash with soap and water. Inhalation: Remove to fresh air. If irritation persists, call physician. Ingestion: Do not induce vomiting. Give large quantity of water; call physician.

## SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

**Steps To Be Taken In Case Material Is Released Or Spilled:** Pick up with mop or wet vac and wash away with water.

**Waste Disposal Method:** Wash small quantities down sewer with large amount of water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. Large spills should be picked up with wet vac or absorbent material. Landfill or incinerate solids. Dispose of liquid per local, state and federal regulations.

**Precautions To Be Taken In Handling And Storing:** Freezing of product may rupture container and damage product quality. Product shelf life is best retained by storage at 45-100 °F temperatures.

**Other Precautions:** This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR Part 372.

## SECTION VIII -- CONTROL MEASURES:

**Respiratory Protection (Specify Type):** None required when used according to label directions

**Ventilation:** At least 10 air changes / hour recommended

**Local Exhaust =** Not required    **Mechanical (General) =** Suggested    **Special =** N/A    **Other =** N/A

**Protective Gloves:** Recommended

**Eye Protection:** Chemical goggles

**Other Protective Clothing or Equipment:** N/A

**Work / Hygienic Practices:** Do not take internally; wash contaminated clothing before reuse.

## SECTION IX - TRANSPORTATION INFORMATION:

**Applicable regulations:** 49 CFR = no; IMCO = no; IATA = no

**Proper shipping name:** Liquid Wax and Floor Polish

**UN No.:** not applicable    **Limited Qty.:** not applicable    **Hazard Class:** not applicable

**Labels required:** not required    **DOT Exception:** not applicable

**EPA Hazardous waste number / code:** not listed

**Hazardous waste characteristics:**

**Ignitability =** not applicable;    **Corrosivity =** not applicable;    **Reactivity =** not applicable

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