

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 2 Flammability = 2 Reactivity = 0
HMIS RATING: Health = 2 Flammability = 2 Reactivity = 0

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (0666C)

Manufacturer's Name: HILLYARD INDUSTRIES

Product Name: PENETRATING SEAL NO. 21

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

Date Prepared: June 22, 1994

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. 2303)

<http://www.hillyard.com>

SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity: Common Name(s))	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Aliphatic hydrocarbon petroleum naphtha	64742-88-7	100 ppm *	100 ppm *	N/A	70-75
Tung oil	68553-19-5	none	none	N/A	---

* Not established for this CAS #; use Stoddard solvent, CAS #8052-41-3, for PEL and TLV.

V.O.C. = 593 gm/l.; V.O.S. = 4.9 lbs/gal.

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 338°F	Specific Gravity (H₂O = 1): 25°C = 0.824 & 39°C = 0.824
Vapor Pressure (mm Hg.): 2.8	Percent Volatile by Volume (%): 71.55
Vapor Density (AIR = 1): 4.8	Evaporation Rate (ethyl ether = 1): slower than 1
Solubility in Water : negligible	Appearance and Odor: amber-brown liquid; petroleum distillate odor

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: 100°F min.(Tag Closed Cup) **Flammable Limits:** LEL = 0.9% UEL = No data
Extinguishing Media: Carbon dioxide, dry chemical, foam. Use NFPA Class B extinguishers.
Special Fire Fighting Procedures: Treat as any petroleum solvent fire. Avoid spreading liquid and fire by water. Wear full protective equipment including self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Keep container closed and isolated from heat, electrical equipment, sparks and flame. Never weld or use cutting torch on or near package.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** Elevated temperatures

Incompatibility (Materials to Avoid): Avoid contact with strong acids and strong oxidizing agents.

Hazardous Decomposition Products or Byproducts: None under normal conditions. Thermal decomposition may produce organic acids, carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will not occur **Conditions to Avoid:** N/A

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Ingestion? Yes

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Eye irritant; can cause skin irritation; can defat skin and lead to dermatitis.
2. Chronic overexposure leads to central nervous system depression and permanent brain and nervous system damage.

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 than or equal to 0.1%.

SECTION VI -- HEALTH HAZARD DATA cont.

Signs and Symptoms of Exposure: Overexposure can lead to upper respiratory irritation; swallowing can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Medical Conditions Generally Aggravated by Exposure: Pre-existing eye, skin and respiratory disorders.

Emergency and First Aid Procedures: INHALATION: If affected by inhalation of vapor remove to fresh air. Restore breathing; treat symptomatically; consult physician. EYES: Flush immediately with large amounts of water for at least 15 minutes; take to a physician for medical treatment. SKIN: Wash affected areas with soap and water. Remove contaminated clothing; consult physician if irritation persists. INGESTION: DO NOT INDUCE VOMITING; consult physician or poison control center immediately; treat symptomatically.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition (flames, hot surfaces; electric, static or friction sparks). Avoid breathing vapors. Ventilate area. Contain and remove with inert absorbent and non-sparking tools. Do not smoke when working with product. Do not pick up solution with automatic scrubber or wet pick up vacuum.

Waste Disposal Method: Dispose of in accordance with state or local regulations. Incinerate in approved facility; do not incinerate closed container. Do not dispose of in storm drains or waterways.

Precautions To Be Taken In Handling And Storing: Since empty packages retain product residue, follow label warnings even after package is empty. Keep container closed when not in use. Do not store at temperatures above 110°F.

Other Precautions: USE WITH ADEQUATE VENTILATION. Avoid breathing vapors or spray mist. Open windows and doors, use exhaust fans or other means to insure fresh air entry during application and drying. Refer to OSHA Standard 29 CFR 1910.94 for technical guidelines on keeping air contamination below acceptable exposure limits. Avoid prolonged contact with skin. Do not take internally. 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): Wear appropriate, properly fitted respirator (NIOSH or MSHA approved) unless air monitoring demonstrates vapor or mist levels are below applicable limits.

Ventilation: At least 10 air changes per hour recommended

Local Exhaust = Recommended **Mechanical (General) =** Recommended **Special =** N/A **Other =** N/A

Protective Gloves: Impervious rubber gloves **Eye Protection:** Chemical safety goggles

Other Protective Clothing or Equipment: Protective clothing such as uniforms, coveralls

Work / Hygienic Practices: Wash contaminated clothing before reuse (including shoes).

SECTION IX - TRANSPORTATION INFORMATION:

Applicable regulations: CFR = no; IMCO = yes; IATA = yes

Proper shipping name for air and foreign water: Paint, 3, UN1263, III

Proper shipping name for highway: Varnish

UN No.: not applicable for highway **Limited Qty.:** not applicable **Hazard class:** not applicable for highway

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

EPA Hazardous waste characteristics: Ignitability=yes; Corrosivity=not applicable; Reactivity=not applicable.

DISCLAIMER OF WARRANTIES

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY NATURE ARE MADE WITH RESPECT TO THE PRODUCT(S) OR INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET.

The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate.

THE BUYER OR USER ASSUMES ALL RISKS ASSOCIATED WITH THE USE, MISUSE OR DISPOSAL OF THIS PRODUCT. THE BUYER OR USER IS RESPONSIBLE TO COMPLY WITH ALL FEDERAL, STATE OR LOCAL REGULATIONS CONCERNING THE USE, MISUSE OR DISPOSAL OF THESE PRODUCTS.