

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 (568-175)

Manufacturer's Name: HILLYARD INDUSTRIES

Product Name: HT CONCRETE SEAL (PART A)

Address: 302 North Fourth Street

Date Prepared: September 17, 2013 (new)

St. Joseph, MO 64501

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. 8285)

<http://www.hillyard.com>

*SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity:

Common Name(s)	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Bisphenol A diglycidyl ether resin	25085-99-8	N/E	N/E	N/A	45 - 55
Water	7732-18-5	None	None	N/A	---
Dipropylene glycol n-propyl ether	29911-27-1	N/E	N/E	N/A	1 - 5

VOC < 90 g/l

N/A= Not Applicable N/E= Not Established

*SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corr.	212°F	Specific Gravity (H ₂ O = 1): 25°C =	1.14	Density =	9.49 lbs/gl.
Vapor Pressure (mm Hg.):	2.3	Percent Volatile by Weight (%):	57.5 - 58.5%		
Vapor Density (AIR = 1):	0.62	Evaporation Rate (ethyl ether = 1):	slower than 1		
Solubility in Water:	Complete	Appearance and Odor:	White liquid with mild odor		
pH (concentrate)=	6 - 8				

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: >212°F Flammable Limits: LEL = not determined UEL = N/A

Extinguishing Media: Carbon dioxide, dry chemical, fog or water spray

Special Fire Fighting Procedures: Self-contained breathing apparatus with full face-piece operated in pressure demand or other pressure mode.

Unusual Fire and Explosion Hazards: May form carbon dioxide and carbon monoxide.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): Oxidizing agents, peroxides, mineral acids and strong bases

Hazardous Decomposition Products or Byproducts: Carbon monoxide, carbon dioxide and products of combustion of organic material. Reaction with peroxides may result in violent decomposition.

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. Prolonged skin exposure may cause mild irritation.

2. Epoxy resins are capable of causing sensitization of skin; sensitivity varies from person to person.

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: Prolonged exposure may cause skin irritation.

Medical Conditions Generally Aggravated by Exposure: Epoxy resins are capable of causing sensitization of skin; sensitivity varies from person to person.

Emergency and First Aid Procedures: In case of contact immediately wash skin with soap and water. Remove contaminated clothing and wash clothing before reuse; if symptoms occur call a physician.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Dike spill area and add absorbent earth, sand or sawdust to spilled liquid. Keep out of sewers.

Waste Disposal Method: Collect absorbent/spilled mixture into metal containers. Dispose of in accordance with local, state and federal regulations. Incinerate in approved facility.

Precautions To Be Taken In Handling And Storing: Keep containers closed tightly when not in use. Store in cool, well ventilated areas away from heat and out of direct sunlight. Protect from freezing. **Notice:** Saw dust from freshly sanded floors or dust from wood floors that have been abraded between coats will spontaneously catch fire if improperly discarded. Immediately after abrading or sanding wood floors, place dust waste in a sealed, water-filled metal container and immediately remove from building. **Notice:** Rags or applicators soaked in a combustible liquid will spontaneously catch fire if improperly discarded. Immediately after using rags or applicators soaked in a combustible liquid, place waste in a sealed, water-filled metal container and immediately remove from building.

Other Precautions: Avoid prolonged breathing of vapor or spray mist. Avoid prolonged or repeated contact with skin. 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): If sprayed, use respiratory MESA/NIOSH approved for mist and organic vapor. None normally needed.

Ventilation:

Local Exhaust = N/A **Mechanical (General) =** Adequate ventilation required **Special =** N/A **Other =** N/A

Protective Gloves: Rubber gloves suggested **Eye Protection:** None normally needed

Other Protective Clothing or Equipment: To prevent repeated or prolonged contact, wear impervious clothing and boots.

Work / Hygienic Practices: Wash hands before eating or using washroom.

SECTION IX - TRANSPORTATION INFORMATION

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

Proper shipping name: Varnish.

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.

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.

MATERIAL SAFETY DATA SHEET

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

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (568-175)

Manufacturer's Name: HILLYARD INDUSTRIES **Product Name:** HTC Concrete Seal (PART B)
Address: 302 North Fourth Street **Date Prepared:** September 17, 2013 (new)
 St. Joseph, MO 64501 **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. 8285)
<http://www.hillyard.com>

SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity:

Common Name(s)	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Water	7732-18-5	none	none	N/A	---
Polyamine Polymer	Unknown to Hillyard	N/E	N/E	N/E	13 - 23
O,O'-Bis(2-aminopropyl)polypropylene glycol	9046-10-0	N/E	N/E	N/A	1- 3
Tetraethylenepentamine ⁽¹⁾	112-57-2	N/E	N/E	N/A	0.5 - 2

⁽¹⁾Regulated by OSHA, MA and PA

VOC = 0

N/A= Not Applicable N/E= Not Established

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corr. 212°F **Specific Gravity (H₂O = 1):** 25°C = 1.036 **Density=** 8.63 lbs/gl
Vapor Pressure (mm Hg.): 2.3 **Percent Volatile by Weight (%):** 71 - 72 %
Vapor Density (AIR = 1): 0.62 **Evaporation Rate (ethyl ether = 1):** slower than 1
Solubility in Water: Complete **Appearance and Odor:** Yellow liquid with amine odor
pH (concentrate): 10 - 11

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: >212°F **Flammable Limits:** LEL = not determined UEL = not applicable

Extinguishing Media: Carbon dioxide, dry chemical, fog or water spray.

Special Fire Fighting Procedures: Self-contained breathing apparatus with full face-piece operated in pressure demand or other pressure mode.

Unusual Fire and Explosion Hazards: May form carbon dioxide and carbon monoxide.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable

Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): Oxidizing agents, Peroxides, Sodium Hypochlorite, Organic Acids, Mineral Acids, or strong bases.

Hazardous Decomposition Products or Byproducts: Carbon monoxide, carbon dioxide and products of combustion of organic material. Reaction with peroxides may result in violent decomposition. Nitrosamines can be formed when product exposed to nitric acid.

Hazardous Polymerization: Will not occur

Conditions to Avoid: N/A

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Ingestion? No

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Eye irritant. Prolonged exposure to skin may cause discomfort and dermatitis. Causes nose and throat irritation. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
2. Reports have associated repeated and prolonged occupational overexposure to solvent with 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: Eye irritation. Vapor harmful - may affect the brain or nervous system causing dizziness, headache or nausea. Product is not a primary skin irritant per Federal Hazardous Substance Act, CFR 15 Chapter IIc, Paragraph 1500.41 and 1500.42. Overexposure to propylene glycol monomethyl ether may cause mild eye, nose and throat irritation; headache, nausea and Central Nervous System depression.

Medical Conditions Generally Aggravated by Exposure: None known to Hillyard.

Emergency and First Aid Procedures: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact immediately flush with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, do not induce vomiting. Call a physician immediately.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: If spilled contain spilled material and remove with inert absorbent. Do not let spilled or leaking material enter watercourse.

Waste Disposal Method: Collect absorbent/spilled mixture into plastic containers. Dispose of contaminated absorbent, container and unused contents in accordance with federal, state and local regulations.

Precautions To Be Taken In Handling And Storing: Keep containers closed tightly when not in use. Store in cool, well ventilated areas away from heat and out of direct sunlight. Protect from freezing. **Notice:** Saw dust from freshly sanded floors or dust from wood floors that have been abraded between coats will spontaneously catch fire if improperly discarded. Immediately after abrading or sanding wood floors, place dust waste in a sealed, water-filled metal container and immediately remove from building. **Notice:** Rags or applicators soaked in a combustible liquid will spontaneously catch fire if improperly discarded. Immediately after using rags or applicators soaked in a combustible liquid, place waste in a sealed, water-filled metal container and immediately remove from building. **Other Precautions:** Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. **USE ONLY WITH ADEQUATE VENTILATION.** Do not breathe vapors or spray mist. **Ensure fresh air entry during application and drying.** If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use. Close container after each use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. 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): If sprayed, use respirator MESA/NIOSH approved for mist and organic vapor. None normally needed.

Ventilation:

Local Exhaust = N/A **Mechanical (General)** = Adequate ventilation required **Special** = N/A **Other** = N/A

Protective Gloves: Rubber or neoprene gloves **Eye Protection:** None normally needed

Other Protective Clothing or Equipment: To prevent repeated or prolonged contact, wear impervious clothing and boots. **Work / Hygienic Practices:** Wash hands before eating or using washroom.

SECTION IX - TRANSPORTATION INFORMATION

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

Proper shipping name: Varnish

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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MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0
HMIS RATING: Health = 1 Flammability = 0 Physical Hazard = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION

(571N-73A)

Manufacturer's Name: HILLYARD INDUSTRIES**Product Name:** Concrete Primer**Address:** 302 North Fourth Street**Date Prepared:** September 17, 2013 (new)

St. Joseph, MO 64501

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. 8285)<http://www.hillyard.com>**SECTION II -- INGREDIENTS/IDENTITY INFORMATION****Components**

(Specific Chemical Identity: Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Water	7732-18-5	none	none	N.A.	75-80
Polymer Emulsion	Unknown to Hillyard	N.E.	N.E.	N.E.	10-20
Tributoxyethyl Phosphate	78-51-3	N.E.	N.E.	N.E.	1-3
Diphenyl Ketone	119-61-9	N.E.	N.E.	TWA 0.5 mg/m ³	< 0.1

WARNING: This product contains a chemical known to the State of California to cause cancer. Diphenyl Ketone 119-61-9
 Volatile Organic Compounds ≤ 90 grams per liter N/A= Not Applicable N/E= Not Established

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: >200°F	Specific Gravity (H₂O = 1): 25°C = 1.01	Density= 8.43 lbs/gl.
Vapor Pressure (mm Hg.): 17.8	Percent Volatile by Weight (%): 78 – 80 %	
Vapor Density (AIR = 1): 0.8975	Evaporation Rate (ethyl ether = 1): Slower than 1	
Solubility in Water : Complete	Appearance and Odor: White emulsion; non-objectionable odor	
pH (concentrate) 8-9		

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: >200° (T.C.C.) **Flammable Limits:** LEL = N.A. UEL = N/A
Extinguishing Media: Foam, carbon dioxide, dry chemical, water fog
Special Fire Fighting Procedures: Self-contained breathing apparatus with full face piece operated in pressure demand or other pressure mode
Unusual Fire and Explosion Hazards: May form carbon dioxide and carbon monoxide

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: When exposed to fire, produces smoke, soot, carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur **Conditions to Avoid:** None known to Hillyard

SECTION VI -- HEALTH HAZARD DATA

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

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. According to Federal Hazardous Substance Act test on like product was not a skin or eye irritant. Prolonged exposure may cause skin irritation. Excessive exposure to vapors or spray mist can cause irritation of the eyes, nose and throat.
2. None known to Hillyard.

Chemical listed as Carcinogen or Potential Carcinogen: Diphenyl Ketone <0.1 %

National Toxicology Program = No **I.A.R.C. Monographs =** 2B **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%.

Signs and Symptoms of Exposure: Prolonged skin contact may cause severe irritation. Excess inhalation may irritate nose and throat. Ingestion may cause gastrointestinal irritation.

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

Emergency and First Aid Procedures: **Skin:** In case of skin immediately flush skin with plenty of water for 15 minutes. If irritation persists, get medical attention. **Eyes:** In case of eye contact, flush immediately with large amounts of water for at least 15 minutes. If swallowed, consult a physician. If irritation persists, get medical attention. **Inhalation:** If exposed to high concentrations of vapor, remove to fresh air; if breathing difficulty persists, call a physician. **Ingestion:** If swallowed, do not induce vomiting, contact a physician or local poison control center.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb spill with floor dry or similar inert material. Sweep or scrape up and put in appropriate container. Do not let spilled or leaking material enter watercourse.

Waste Disposal Method: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local /regional / national/international regulations. Dispose in accordance with all applicable regulations.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Store in cool, well ventilated area away from heat and out of direct sunlight. Protect from freezing. **Notice:** Saw dust from freshly sanded floors or dust from wood floors that have been abraded between coats will spontaneously catch fire if improperly discarded. Immediately after abrading or sanding wood floors, place dust waste in a sealed, water-filled metal container and immediately remove from building. **Notice:** Rags or applicators soaked in a combustible liquid will spontaneously catch fire if improperly discarded. Immediately after using rags or applicators soaked in a combustible liquid, place waste in a sealed, water-filled metal container and immediately remove from building.

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. Avoid prolonged or repeated contact with skin. Refer to OSHA Standard 29 CFR 1910.94 for technical guidelines on keeping air contamination below acceptable exposure limits. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning & Community Right to Know Act of 1986 and 40 CFR Part 372.

SECTION VIII -- CONTROL MEASURES:

Respiratory Protection (Specify Type): None normally required when used according to label directions. When airborne exposure guidelines and/or comfort levels may be exceeded, use approved air-purifying respirator. Avoid breathing spray mist. If sprayed, wear mechanical filter respirator to remove solid particles of over spray.

Ventilation:

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

Protective Gloves: Rubber gloves if unable to avoid skin contact **Eye Protection:** Not necessary

Other Protective Clothing or Equipment: None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.

Work / Hygienic Practices: Wash thoroughly after handling. Upon contact remove contaminated clothing and shoes; wash before reuse (including shoes).

SECTION IX - TRANSPORTATION INFORMATION:

Applicable regulations: 49 CFR = No; IMCO = No; IATA = No.

Proper shipping name: Varnish

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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