Material Name: HENRY 547

MSDS ID: WWHC-004

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer's Part Number: H547 Chemical Name: Cement-based Underlayment Product Use: Feather-Edge Underlayment

Manufacturer Information

The W.W. Henry Company 400 Ardex Park Drive Aliquippa, PA 15001 Phone: 724-203-8213 or 724-203-8445

Emergency # CHEMTREC U.S. 800-424-9300

*** Section 2 - Hazards Identification ***

Emergency Overview

Product is a gray powder. Severe Irritant/Possible Burns. Toxic. Combines with available moisture such as that on skin, in eyes, or on mucous membranes to produce a substance capable of causing severe irritation or chemical burns. Harmful if inhaled, swallowed or allowed to remain in contact with the skin.

Hazard Statements

WARNING! Causes severe irritation and possible burns. Do NOT get into eyes, on skin or on clothing. Do NOT breathe vapor. Do NOT swallow. Wash thoroughly after handling. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation. Keep out of the reach of children.

Potential Health Effects: Eyes

Causes severe irritation and possible burns depending on amount and duration of exposure. Combines with moisture present in eyes to produce a corrosive substance capable of causing chemical burns. Smaller amounts of dust may cause irritation.

Potential Health Effects: Skin

Will combine with any moisture on the skin to produce a corrosive material which causes severe irritation or burns to the skin depending on amount and duration of exposure.

Potential Health Effects: Ingestion

Will severely irritate the gastrointestinal tract. Can cause intestinal blockage if ingested in large amounts.

Potential Health Effects: Inhalation

May cause severe irritation or burns if inhaled. This material will combine with moisture in the lungs to produce a corrosive substance capable of causing severe irritation, burns or lung damage depending on amount and duration of exposure.

Medical Conditions Aggravated by Exposure

This material may worsen existing respiratory or skin conditions.

HMIS Ratings: Health: 3* **Fire:** 0 **Reactivity:** 0 **Pers. Prot.:** gloves, safety glasses, protective clothing Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
1317-65-3	Limestone	30-60
65997-15-1	Portland cement	15-40
65997-16-2	Cement, alumina, chemicals	10-30
39445-23-3	Calcium magnesium hydroxide (CaMg(OH)4)	3-7

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is a controlled product under the criteria specified in the Canadian Workplace Hazardous Materials Information System (WHMIS).

Trace impurities and additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Immediately flush eyes with large amounts of water, including under the eyelids, for 15-30 minutes. Remove contact lenses if present and easy to do. Obtain immediate medical attention.

First Aid: Skin

In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Wash with mild soap if needed to completely remove material. Obtain immediate medical attention.

First Aid: Ingestion

Obtain immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If not breathing, have qualified personnel give artificial respiration and seek medical attention immediately.

First Aid: Notes to Physician

Product reacts with moisture producing a highly alkaline pH of 12-13.

* * Section 5 - Fire Fighting Measures * *

General Fire Hazards

See Section 9 for Flammability Properties.

Material is not flammable.

Hazardous Combustion Products

Under conditions of fire, material may decompose and emit oxides of calcium, oxides of magnesium, oxides of iron, oxides of aluminum, carbon monoxide, carbon dioxide, and/or low molecular weight hydrocarbons.

Material Name: HENRY 547

Extinguishing Media

Use extinguishing media appropriate for surrounding materials.

Fire Fighting Equipment/Instructions

Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 3 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions

Do NOT get into eyes, on skin or on clothing. Do NOT breathe vapor. Do NOT swallow. Wash thoroughly after handling. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation.

Containment Procedures

Wear appropriate personal protective equipment to prevent contact with material during clean up procedure, including impervious gloves and safety glasses. Contain spill with inert material. Block any potential routes to water systems.

Environmental Precautions

Prevent discharge into sewers or waterways.

Clean-Up Procedures

Pick up material and place into DOT or TDG approved container. Ventilate the area. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management. Ventilate the contaminated area.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Material is corrosive when in contact with moisture; avoid contact during clean up.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Normal, ambient ventilation should be sufficient. Avoid creating dust. If work process generates excessive quantities of dust, or exposures in excess of the PEL, wear a respirator. Avoid contact with skin and eyes. Avoid prolonged or repeated skin contact with this material. Avoid breathing dust from this product. Use this product with adequate ventilation. Keep away from heat and direct sunlight. Wear protective goggles and gloves when handling material. Wash thoroughly after handling.

MSDS ID: WWHC-004

Material Name: HENRY 547

MSDS ID: WWHC-004

Storage Procedures

Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing bags in direct sunlight. Do not store in open, unlabeled or mislabeled containers. Keep bags closed and upright when not in use to prevent leakage. Open bags carefully and slowly. Avoid creating dust. Keep product dry until used. Avoid breakage of bagged material.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Consult local authorities for acceptable exposure limits.

Limestone (1317-65-3)

•	/
OSHA:	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH:	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Alberta:	10 mg/m3 TWA
British Columbia:	10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction)
	20 mg/m3 STEL (total dust)
New Brunswick:	10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica)
NW Territories:	5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)
Nunavut:	5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)
Quebec:	10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)
Saskatchewan:	10 mg/m3 TWA
	20 mg/m3 STEL
Yukon:	30 mppcf TWA; 10 mg/m3 TWA
	20 mg/m3 STEL

Portland cement (65997-15-1)

ACGIH:	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)
OSHA:	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH:	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Alberta:	10 mg/m3 TWA
British Columbia:	10 mg/m3 TWA (total particulate matter containing no asbestos and less than 1% crystalline silica); 3
	mg/m3 TWA (respirable particulate matter containing no asbestos and less than 1% crystalline silica)
Manitoba:	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)
New Brunswick:	10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica)
NW Territories:	5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)
Nova Scotia:	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)
Nunavut:	5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass)
Ontario:	10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)
Quebec:	10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica); 5 mg/m3
	TWAEV (respirable dust, containing no asbestos and less than 1% crystalline silica)
Saskatchewan:	10 mg/m3 TWA
	20 mg/m3 STEL
Yukon:	30 mppcf TWA; 10 mg/m3 TWA
	20 mg/m3 STEL

Engineering Controls

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Material Name: HENRY 547

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Chemical splash goggles or safety glasses with side shields are recommended.

Personal Protective Equipment: Skin

Wear impervious gloves and protective clothing. Rubber or latex gloves are recommended.

Personal Protective Equipment: Respiratory

Under normal conditions of use, respiratory protection should not be necessary. If work process generates excessive quantities of dust, or exposures in excess of the PEL, wear a respirator.

Personal Protective Equipment: General

Eye wash fountains and emergency showers are required in the workplace when handling corrosive substances. Use good industrial hygiene practices when handling this material.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:PowderOdor:Cement OdorpH:12-13Vapor Density:Not availableMelting Point:Not availableDensity:3Flash Point Method:Not applicableAuto Ignition:Not applicableBulk Density:25-27 lbs/galVOC:0 g/L

Color: Gray Physical State: Solid Vapor Pressure: Not available Boiling Point: Not applicable Solubility in Water: <5% Flash Point: Not applicable LFL: Not applicable UFL: Not applicable Percent Volatile: 0%

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

Stable under normal conditions.

Conditions to Avoid

Protect from moisture.

Incompatibility

Avoid contact with acids or moisture. Reacts with acid to produce carbon dioxide. Contact with moisture produces corrosive material.

Hazardous Decomposition

Under conditions of fire, material may decompose and emit oxides of calcium, oxides of magnesium, oxides of iron, oxides of aluminum, carbon monoxide, carbon dioxide, and/or low molecular weight hydrocarbons.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

MSDS ID: WWHC-004

Material Name: HENRY 547

* * * Section 11 - Toxicological Information * * *

Acute Dose Effects

A: General Product Information

Material is corrosive and will cause burns when in contact with moist skin or eyes. Toxic. Harmful if swallowed. May cause severe irritation or damage to lungs if inhaled in significant quantities.

B: Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Repeated Dose Effects

Repeated or prolonged exposure to dust may cause damage to the lungs.

Corrosivity

Material is corrosive when in contact with moisture. Can cause skin and eye burns.

Carcinogenicity

A: General Product Information

No information is available for the product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information is available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Bioaccumulation & Accumulation

Not expected to bioaccumulate.

Mobility in Environmental Media

No information is available for the product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Material, if discarded, may be a D003 characteristic hazardous waste under RCRA. You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Material Name: HENRY 547

MSDS ID: WWHC-004

Disposal Instructions

Dispose of container and any unused contents in accordance with Federal, State, Provincial, and Local Waste Disposal Regulations. Do not flush unused contents or residue down drains. Do not reuse bags. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

* * * Section 14 - Transportation Information * *

US DOT Information

Shipping Name: Not regulated as a hazardous material for transport.

TDG Information

Shipping Name: Not regulated as a dangerous good for transport

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No information available for the product.

B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No Reactive: No

C: Component Marine Pollutants

No information is available.

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Limestone	1317-65-3	No	Yes	Yes	Yes	Yes	Yes
Portland cement	65997-15-1	No	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

WHMIS Classification: E, D2A

Material Name: HENRY 547

Additional Regulatory Information

A: General Product Information

No additional information available for the product.

B: Component Analysis – Inventory

Component	CAS #	TSCA	CAN	EEC
Limestone	1317-65-3	Yes	NDSL	EINECS
Portland cement	65997-15-1	Yes	DSL	EINECS
Cement, alumina, chemicals	65997-16-2	Yes	DSL	EINECS
Calcium magnesium hydroxide (CaMg(OH)4)	39445-23-3	Yes	NDSL	EINECS

* * * Section 16 - Other Information * * *

Other Information

Additional Safety Information for Consumers:

Keep locked up and out of the reach of children.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CAS = Chemical Abstracts Service; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CPR = Controlled Products Regulations; DOT = Department of Transportation; DSL = Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; EPA = Environmental Protection Agency; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; mg/Kg = milligrams per Kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; MSHA = Mine Safety and Health Administration; NA = Not Applicable or Not Available; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; SARA = Superfund Amendments and Reauthorization Act; TDG = Transport Dangerous Goods; TSCA = Toxic Substances Control Act; WHMIS = Workplace Hazardous Materials Information System.

End of Sheet WWHC-004