

MATERIAL SAFETY DATA SHEET**Section 1 - Identification****Manufacturer's name and address:****HENRY.**

The W.W. Henry Company

400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

Information Telephone No. : (724) 203-8499

Visit our Website: <http://www.wwhenry.com>**Supplier's name and address:**

Refer to Manufacturer

24 Hr. Emergency Tel # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)**Product Identifier** : **Henry 412 Rubber Flooring Adhesive****Chemical Name** : N/Ap **Chemical Family** : Mixture.**Chemical Formula** : N/Ap **Trade Name/Synonyms** : Henry® 412**Molecular Weight** : N/Ap **Material Use** : Latex adhesive for installation of rubber tile/sheet and rubber/vinyl stair treads.**HMIS Rating** : * - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious*Health:* *1 *Flammability:* 1 *Reactivity:* 0**SECTION 2 - HAZARDS IDENTIFICATION****Classification** : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 1 for a WHMIS Classification for this product. WHMIS classification:
Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material).OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:
Chronic Health Hazard.**Emergency overview:** : Off white paste. Mild odour.
Caution! May be mildly irritating to eyes and skin. May be harmful if inhaled or swallowed. May cause respiratory irritation. Contains particles which may cause lung damage or cancer if inhaled in large quantities.**POTENTIAL HEALTH EFFECTS:****Signs and symptoms of short-term (acute) exposure***Inhalation* : May cause irritation of the nose, throat, mucous membranes, and respiratory tract.*Skin* : Direct skin contact may cause slight or mild, transient irritation.*Eyes* : May cause mild transient irritation.*Ingestion* : Ingestion of large amounts may cause stomach irritation. May cause nausea, vomiting, and diarrhea.**Effects of long-term (chronic) exposure**

: Prolonged skin contact may cause skin irritation.

Carcinogenic status : Possible cancer hazard. See TOXICOLOGICAL INFORMATION, Section 11.**Additional health hazards** : See TOXICOLOGICAL INFORMATION, Section 11.**Potential environmental effects**

: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt.%
Limestone	1317-65-3	30.00 - 50.00
Crystalline silica, quartz	14808-60-7	0.10 - 0.50
Vinyl acetate	108-05-4	0.10 - 0.50
potassium hydroxide	1310-58-3	0.10 - 0.50

Note:: This product does NOT contain asbestos.

SECTION 4 - FIRST AID MEASURES

Inhalation	: If inhaled, move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. If symptoms develop, seek medical attention.
Skin contact	: Remove contaminated clothing. Wash off with soap and plenty of water. Launder clothing before reuse. If irritation or symptoms develop, seek medical attention.
Eye contact	: Flush with plenty of water. If irritation persists, seek prompt medical attention.
Ingestion	: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.
Notes For Physician	: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES**Fire hazards/conditions of flammability**

- : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200)

- : Non-flammable.

Oxidizing properties

- : None.

Explosion data: Sensitivity to mechanical impact / static discharge

- : Not expected to be sensitive to mechanical impact or static discharge.

Suitable extinguishing media

- : Dry chemical, foam, carbon dioxide and water fog.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

Hazardous combustion products

- : Carbon oxides; calcium oxide; Other unidentified organic compounds.

NFPA Rating

- | | | | |
|------------------|------------------------|-----------------------|------------------------------|
| 0 - Minimal | 1 - Slight | 2 - Moderate | 3 - Serious |
| <i>Health: 1</i> | <i>Flammability: 1</i> | <i>Instability: 0</i> | <i>Special Hazards: None</i> |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions	: Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment. Refer to point 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
Environmental precautions	: Do not allow product to enter waterways. Do not allow material to contaminate ground water system.
Spill response/cleanup	: Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Contain material, preventing it from entering sewer lines or waterways. Use inert, non-combustible absorbents to assist the pick up of material. Scrape up product and place it into a container for disposal. Refer to Section 13 for disposal of contaminated material. Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.
Prohibited materials	: None known.

Special spill response procedures

- : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
- US CERCLA Reportable quantity (RQ): Not applicable.

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Wear suitable protective equipment during handling. Use with adequate ventilation. Training the workers on the potential health hazards associated with product vapor, dust or fume is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Sanding and grinding dusts may be harmful if inhaled. Do not sand off excess material, following initial application. When removing adhesive from existing flooring (ie. during a renovation), do not mechanically remove under dry conditions (e.g. blasting, chipping, mechanically pulverizing). Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Keep away from oxidizing materials. Keep containers tightly closed when not in use. Wash thoroughly after handling.
- Storage requirements** : Store in a cool, dry, well-ventilated area. No smoking in the area. Keep away from incompatibles. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Protect against physical damage.
- Incompatible materials** : Oxidizing agents; Acids.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u>Exposure Limits</u>				
<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Limestone	N/Av	N/Av	15 mg/m ³ (total dust); 5 mg/m ³ (respirable fraction)	N/Av
Crystalline silica, quartz	0.025 mg/m ³	N/Av	0.1 mg/m ³ (final rule limit)	N/Av
Vinyl acetate	10 ppm	15 ppm	10 ppm (final rule limit)	20 ppm (final rule limit)
potassium hydroxide	2 mg/m ³ (Ceiling)	N/Av	2 mg/m ³ (Ceiling) (final rule limit)	N/Av

Ventilation and engineering measures

- : Use in a well-ventilated area. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

- : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Advice should be sought from respiratory protection specialists.

Skin protection

- : Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye / face protection

- : If splashing might occur, wear eye protection such as safety glasses with side shields.

Other protective equipment

- : Wear sufficient clothing to prevent skin contact. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

- : Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|-----------------------|---------------|------------------------|--------------------|
| Physical state | : paste | Appearance | : Off white paste. |
| Odour | : Mild odour. | Odour threshold | : N/Av |
| pH | : 7.2 - 7.8 | | |

Boiling point	: N/Av	Specific gravity	: 1.37
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: N/Av	Solubility in water	: miscible
Vapour density (Air = 1)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Volatile organic Compounds (VOC's)	: 0 g/L	Volatiles (% by weight)	: 29.5%
Particle size	: N/Av	General Info.	: No additional information.
Flash point	: N/Av	Auto-ignition temperature	: N/Av
Flash point Method	: N/Av	Upper flammable limit (% by vol.)	: Not applicable.
Lower flammable limit (% by vol.)	: Not applicable.	Flashback observed	: Not applicable.
Flame Projection Length	: Not applicable.		

SECTION 10 - REACTIVITY AND STABILITY DATA

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization	: Hazardous polymerisation does not occur.
Conditions to avoid	: Extreme heat. Do not use in areas without adequate ventilation.
Materials To Avoid And Incompatibility	: Oxidizing agents; Acids .
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs	: Eyes, skin, respiratory system and digestive system.
Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin & Eyes</i> : YES <i>Ingestion</i> : YES
Toxicological data	: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Ingredients</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>oral</u>	<u>dermal</u>
Limestone	N/Av	6450 mg/kg	N/Av
Crystalline silica, quartz	N/Av	N/Av	N/Av
Vinyl acetate	3250 - 4100 ppm	2900 mg/kg	2300 mg/kg
potassium hydroxide	N/Av	205 mg/kg	> 1260 mg/kg

Carcinogenic status	: Contains vinyl acetate. Vinyl acetate is classified as carcinogenic by IARC (Group 2B) and ACGIH (Category A3). This product contains Crystalline silica - Quartz. Crystalline silica - Quartz is classified as carcinogenic by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen).
Reproductive effects	: Not expected to cause reproductive effects.
Teratogenicity	: Not expected to be a teratogen.
Mutagenicity	: Not expected to be mutagenic in humans.
Epidemiology	: Not available.
Sensitization to material	: Not expected to be a skin or respiratory sensitizer.
Synergistic materials	: N/Av
Irritancy	: Mild.
other important hazards	: See Section 3 for additional information.
Conditions aggravated by overexposure	: Pre-existing skin, eye and respiratory disorders.


SECTION 12 - ECOLOGICAL INFORMATION

- Ecotoxicity** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Mobility** : No data is available on the product itself.
- Persistence** : No data is available on the product itself.
- Bioaccumulation potential** : No data is available on the product itself.
- Other Adverse Environmental effects**
: No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

- Handling for Disposal** : Handle waste according to recommendations in Section 7.
- Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	Not regulated.	Not regulated	None	
TDG Additional information	None.				
49CFR/DOT	None	Not regulated.	Not regulated	None	
49CFR/DOT Additional information	None.				

SECTION 15 - REGULATORY INFORMATION**Canadian Information:**

Canadian Environmental Protection Act (CEPA): All components of this product are on the Canadian DSL list.

Canadian WHMIS Classification: Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): Not applicable.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product may be subject to SARA notification requirements, since it contains Toxic Chemical constituents above their de minimus concentrations. This product contains: vinyl acetate.

US State Right to Know Laws:

California Proposition 65: This product contains a chemical known to the State of California to cause cancer. Contains: Crystalline silica, quartz. This product may also contain trace amounts of: Ethyl acrylate.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Limestone powder (MA, MN, NJ, PA, RI); Potassium hydroxide (CA, MA, MN, NJ, PA, RI); vinyl acetate (CA, MA, MN, NJ, PA, RI); Crystalline silica, quartz (MA, MN, NJ, PA, RI).

SECTION 16 - OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2011.
2. International Agency for Research on Cancer Monographs, searched 2011.
3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2011 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - October 2006 version.
6. California Proposition 65 List - April 15, 2011 version.

DISCLAIMER OF LIABILITY

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. The W.W. Henry Company will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three (3) years.

Prepared By:

The W.W. Henry Company

400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

(724) 203-8499

Visit our Website: <http://www.wwhenry.com>

Henry 412 Rubber Flooring Adhesive

MSDS Revision Date (dd/mm/yyyy): 26/04/2011

Page 7 of 7

MSDS Preparation Date (dd/mm/yyyy)

: 23/08/2008

MSDS Reviewed Date (dd/mm/yyyy)

: 26/04/2011

Revision No.

: 2

Revision Information

: Sections 2 and 3, switched.

(M)SDS sections updated:

2. HAZARDS IDENTIFICATION;
3. COMPOSITION/INFORMATION ON INGREDIENTS;
5. FIRE-FIGHTING MEASURES;
8. EXPOSURE CONTROLS / PERSONAL PROTECTION;
9. PHYSICAL AND CHEMICAL PROPERTIES;
11. TOXICOLOGICAL INFORMATION;
15. REGULATORY INFORMATION.

END OF DOCUMENT