

**MATERIAL SAFETY DATA SHEET**

**Section 1 - Identification**

**Manufacturer's name and address:**



The W.W. Henry Company

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Aliquippa, PA, U.S.A.  
15001

Information Telephone No. : (724) 203-8499

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

**24 Hr. Emergency Tel #** : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

**Product Identifier** : **Henry 451 "Master Pro" High Performance Carpet Adhesive**

**Chemical Name** : N/Ap **Chemical Family** : Mixture.

**Chemical Formula** : N/Ap **Trade Name/Synonyms** : Henry® 451

**Molecular Weight** : N/Ap **Material Use** : Adhesive for installation of interior carpet.

**HMIS Rating** : \* - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

*Health:* \*2 *Flammability:* 1 *Reactivity:* 0

**SECTION 2 - HAZARDS IDENTIFICATION**

**Classification** : WHMIS classification:  
Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material);  
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:  
Chronic Health Hazard.

During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 (Handling and Storage) for further details.

**Emergency overview:** : Beige, creamy paste. Mild odour.  
Warning! May be mildly irritating to eyes and skin. May cause allergic respiratory reaction. May cause allergic skin reaction.

**POTENTIAL HEALTH EFFECTS:**

**Signs and symptoms of short-term (acute) exposure**

- Inhalation* : Inhalation of mist causes irritation of respiratory system.
- 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** : See TOXICOLOGICAL INFORMATION, Section 11.

**Additional health hazards** : Possible sensitizer. See TOXICOLOGICAL INFORMATION, Section 11.

**Potential environmental effects** : See ECOLOGICAL INFORMATION, Section 12.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

| <u>Ingredients</u>                       | <u>CAS #</u> | <u>Wt.%</u>   |
|--|--------------|---------------|
| Hydrotreated heavy naphthenic distillate | 64742-52-5   | 10.00 - 30.00 |

|   |            |               |
|---|------------|---------------|
| Kaolin                                      | 1332-58-7  | 10.00 - 30.00 |
| Urea  | 57-13-6    | 1.00 - 5.00   |
| Rosin                                       | 8050-09-7  | 1.00 - 5.00   |
| Solvent refined heavy paraffinic distillate | 64741-88-4 | 1.00 - 5.00   |
| Distillates (petroleum), solvent-refined    | 64741-89-5 | 0.10 - 1.00   |
| Trisodium phosphate                         | 7601-54-9  | 0.10 - 1.00   |
| Ethanolamine                                | 141-43-5   | 0.10 - 1.00   |
| Crystalline silica, quartz                  | 14808-60-7 | 0.10 - 0.30   |

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. Get medical attention.
- Skin contact** : Remove contaminated clothing. Wash off with soap and plenty of water. Get medical attention. Launder clothing before reuse.
- 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; nitrogen oxides (NOx); Sulphur oxides; Phosphorus compounds; Hydrocarbons; Aldehydes; other unidentified organic compounds.

**NFPA Rating**

- 0 - Minimal    1 - Slight    2 - Moderate    3 - Serious    4 - Severe
- 
- : *Health:* 2    *Flammability:* 1    *Instability:* 0    *Special Hazards:* None

**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): None reported.

**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. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. 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. Do not store near any incompatible materials (see Section 10). Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Protect against physical damage.
- Incompatible materials** : See Section 10.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Exposure Limits**

| <u>Ingredients</u>                          | <u>ACGIH TLV</u>                             |   | <u>OSHA PEL</u>   |             |
|---|--|---|---|-------------|
|   | <u>TWA</u>                                   | <u>STEL</u>                                   | <u>PEL</u>  | <u>STEL</u> |
| Hydrotreated heavy naphthenic distillate    | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 10 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral')                                    | N/Av        |
| Kaolin                                      | 2 mg/m <sup>3</sup> (respirable dust)        | N/Av  | 15 mg/m <sup>3</sup> (total dust);<br>5 mg/m <sup>3</sup> (respirable fraction) | N/Av        |
| Urea  | 10 mg/m <sup>3</sup> (AIHA WEEL)             | N/Av  | N/Av  | N/Av        |
| Rosin                                       | N/Av   | N/Av  | N/Av  | N/Av        |
| Solvent refined heavy paraffinic distillate | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 10 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral')                                    | N/Av        |
| Distillates (petroleum), solvent-refined    | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 10 mg/m <sup>3</sup> (As 'Oil mist, mineral') | 5 mg/m <sup>3</sup> (As 'Oil mist, mineral')                                    | N/Av        |
| Trisodium phosphate                         | N/Av   | 5 mg/m <sup>3</sup> (AIHA WEEL)               | N/Av  | N/Av        |
| Ethanolamine                                | 3 ppm  | 6 ppm   | 3 ppm   | N/Av        |
| Crystalline silica, quartz                  | 0.025 mg/m <sup>3</sup>                      | N/Av  | 0.1 mg/m <sup>3</sup> (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**

- : Impervious gloves must be worn when using this product. 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

|   |                   |   |                              |
|---|-------------------|---|------------------------------|
| <b>Physical state</b>                         | : paste           | <b>Appearance</b>                             | : Beige, creamy paste        |
| <b>Odour</b>                                  | : Mild odour.     | <b>Odour threshold</b>                        | : N/Av                       |
| <b>pH</b>                                     | : 9.4             |   |                              |
| <b>Boiling point</b>                          | : N/Av            | <b>Specific gravity</b>                       | : 1.21                       |
| <b>Melting/Freezing point</b>                 | : N/Av            | <b>Coefficient of water/oil distribution</b>  | : N/Av                       |
| <b>Vapour pressure (mmHg @ 20° C / 68° F)</b> | : N/Av            | <b>Solubility in water</b>                    | : Miscible                   |
| <b>Vapour density (Air = 1)</b>               | : N/Av            | <b>Evaporation rate (n-Butyl acetate = 1)</b> | : N/Av                       |
| <b>Volatile organic Compounds (VOC's)</b>     | : 3.0 g/L         | <b>Volatiles (% by weight)</b>                | : 28 - 31%                   |
| <b>Particle size</b>                          | : N/Av            | <b>General Info.</b>                          | : No additional information. |
| <b>Flash point</b>                            | : N/Av            |   |                              |
| <b>Flash point Method</b>                     | : N/Av            | <b>Auto-ignition temperature</b>              | : N/Av                       |
| <b>Lower flammable limit (% by vol.)</b>      | : Not applicable. | <b>Upper flammable limit (% by vol.)</b>      | : Not applicable.            |
| <b>Flame Projection Length</b>                | : Not applicable. | <b>Flashback observed</b>                     | : Not applicable.            |

## SECTION 10 - REACTIVITY AND STABILITY DATA

|   |  |
|---|--|
| <b>Stability and reactivity</b>               | : Stable under the recommended storage and handling conditions prescribed. |
| <b>Hazardous polymerization</b>               | : Hazardous polymerisation does not occur.                                 |
| <b>Conditions to avoid</b>                    | : Extreme heat.  |
| <b>Materials To Avoid And Incompatibility</b> | : Oxidizing agents; Acids .  |
| <b>Hazardous decomposition products</b>       | : None known, refer to hazardous combustion products in Section 5.         |

## SECTION 11 - TOXICOLOGICAL INFORMATION

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

| <b>Ingredients</b>                          | <b>LC<sub>50</sub>(4hr)</b> | <b>LD<sub>50</sub></b> |                         |
|---|-----------------------------|------------------------|-------------------------|
|   | <b>inh, rat</b>             | <b>oral</b>            | <b>dermal</b>           |
| Hydrotreated heavy naphthenic distillate    | 2.18 mg/L (mist)            | > 5000 mg/kg (rat)     | > 2000 mg/kg (rabbit)   |
| Kaolin                                      | N/Av                        | N/Av                   | N/Av                    |
| Urea  | N/Av                        | 8471 mg/kg (rat)       | > 21,000 mg/kg (rabbit) |
| Rosin                                       | N/Av                        | N/Av                   | N/Av                    |
| Solvent refined heavy paraffinic distillate | N/Av                        | > 5000 mg/kg (rat)     | > 5000 mg/kg (rabbit)   |
| Distillates (petroleum), solvent-refined    | > 4000 mg/m <sup>3</sup>    | > 5000 mg/kg (rat)     | > 5000 mg/kg (rabbit)   |
| Trisodium phosphate                         | N/Av                        | 4100 mg/kg (rat)       | 7940 mg/kg (rabbit)     |

|                            |      |                  |                     |
|----------------------------|------|------------------|---------------------|
| Ethanolamine               | N/Av | 1720 mg/kg (rat) | 1000 mg/kg (rabbit) |
| Crystalline silica, quartz | N/Av | N/Av             | N/Av                |

- Carcinogenic status** : Not considered to be a hazard. During normal usage of the product as recommended, airborne dusts will not be present. 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).
- Reproductive effects** : None known.
- Teratogenicity** : None known.
- Mutagenicity** : None known.
- Epidemiology** : Not available.
- Sensitization to material** : May cause allergic respiratory reaction (sensitization) with asthmatic symptoms such as wheezing and chest tightness. May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.
- 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          |  |
| <b>TDG Additional information</b>       | None.     |                |               |               |   |
| 49CFR/DOT                               | None      | Not regulated. | not regulated | none          |  |
| <b>49CFR/DOT Additional information</b> | 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:** *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 Canadian Controlled Products Regulations (CPR). 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): None reported.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

**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: Ethylbenzene.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Kaolin (MA, MN, NJ, PA, RI); Urea (MN); Rosin (MN); Distillates (petroleum), solvent-refined (MA); Trisodium phosphate (CA, MA, MN, NJ, PA); Ethanolamine (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
- AIHA: American Industrial Hygiene Association
- 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
- IARC: International Agency for Research on Cancer
- 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
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TLV: Threshold Limit Values
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WEEL: Workplace Environmental Exposure Level
- WHMIS: Workplace Hazardous Materials Identification System

- References** :
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2009.
  2. International Agency for Research on Cancer Monographs, searched 2009.
  3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2009 (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 - September 11, 2009 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:**

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**MSDS Preparation Date (dd/mm/yyyy)**

: 23/08/2005

**MSDS Reviewed Date (dd/mm/yyyy)**

: 27/10/2009

**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;
  12. ECOLOGICAL INFORMATION;
  15. REGULATORY INFORMATION.

**END OF DOCUMENT**